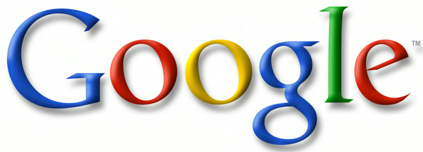

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COLLEGE TRAINING AND THE BUSINESS MAN

CHARLES F. THWING

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Frank A. Vanderlip

While patient Nature, brooding in content
O'er vast reserves of silence, shapes the plan
Of work for Aeons of Accomplishment,
What restlessness attends th' affairs of Man!
Yet even here, hard on the noisy mart,
Sacred the silence of the shelves shall be
To silence-garnered thoughts, a world apart,
Like the unsounded stretches of the sea.

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Gift of

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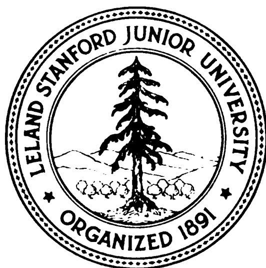

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COLLEGE TRAINING AND THE BUSINESS MAN

PRESIDENT THWING'S BOOKS ON COLLEGE SUBJECTS

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The American College in American Life.

College Administration.

A Liberal Education and a Liberal Faith.

If I Were a College Student.

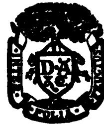
The Choice of a College.

College Training and the Business Man.

COLLEGE TRAINING AND THE BUSINESS MAN

BY

CHARLES F. THWING, LL. D.
PRESIDENT OF WESTERN RESERVE UNIVERSITY AND ADELBERT COLLEGE



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1904

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PREFATORY NOTE

For almost three hundred years the American college has been seeking to serve the higher interests of American life. It has been, and still is, supposed to bear a special relation of preparation for what are known as the " learned professions." Banking, transportation, insurance represent three great labors to which men in increasing numbers and of greater power have in recent years been giving themselves. The purpose of the following pages is to present the advantage which these three vocations, which no one calls " learned," and which the work of general administration, may receive from the college. The purpose is in a way narrow; but I venture to hope that in trying to gain it I have succeeded in illustrating some advantages which the college may give to man as man. For, the great human worth of the college is incomparably superior to its worth in training efficient administrators.

C. F. T.

Cleveland.

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I

IN GENERAL ADMINISTRATION

IN GENERAL ADMINISTRATION

THE world is becoming a vast industrial condition. The basis of society is changed from the military and the domestic to the economic and industrial. The conquest of the world by aggressive peoples is now made rather through the locomotive and the steel bridge than through the rifle. In this condition the United States is a leading power. But these industrial forces which spread themselves round the world are the strongest at home. The United States is both a vast machine-shop and a vast farm; and what lies between the shop and the farm is covered by equally vast systems of railroads. These conditions are formed into great combinations of individuals and of capital. From the individual to the partnership, from the partnership to the corporation, from the corporation to the combination of corporations commonly known as the trust, is the order of development.

This industrial process and also the unifying process in industry will undoubtedly continue. A great financier of New York has recently said that the uniting of banks and financial institutions would continue, if men could be found to manage the resulting combinations.

To this condition, therefore, in which the United States finds itself, as a manager of enormous business interests, what is the relation of the American college? What can the American college do to make these interests more worthy of humanity, and more helpful to the noblest and richest life? What, too, can the American college do to make these business interests themselves more efficient and more remunerative.

The principal means which the American college can use in helping the industrial condition lies in the furnishing of well-equipped workers. But some affirm that the college does not equip, much less well equip, its graduates to be workers in the world's hard work. A leader in American industrial life says:

"I do not think that the college graduate has any advantages in entering business over the grad-

uate of a high or grammar school. My preference has always been for a boy to come to me direct from school and at the age of eighteen, because my experience has shown me that the four years spent in college are not worth as much to him, if he is to become a business man or manufacturer, as the same time in actual business experience. The average college graduate is apt to feel that he is so educated that he is disinclined to begin at the bottom; or, if the case is exceptional and the young man is willing to begin on the lowest round of the ladder, he often becomes discouraged by seeing younger fellows in positions several years in advance of him. There is a great deal to be gained by the discipline of daily life that comes with drudgery, such as the washing of ink-stands, cleaning windows, carrying bundles, and sweeping out the store, although, unfortunately, for the boy's own good, the conditions are such at the present day that he is not called upon to do that work as was the custom a generation ago. I used to say that I did not care to hire a boy who owned a dress suit. Of course, there are exceptions; but, if one wants to succeed as a business man, he must begin by making sacrifices, and anything which shows a tendency toward extravagance is not a promising indication. I would advise a boy of eighteen who wants to become a merchant, business man, or a distributor of products, to go into the business at that age and not go to college. I would not, however, underrate a college education. For a lawyer, a doctor, an engineer, or a successful member of any of

the other learned professions, I believe the university education is almost a necessity. The primary object of all education should be to teach boys and girls how to provide for themselves food, clothing, and shelter."

The proposition which I desire to support is, that the graduate of the American college, other things or qualities being the same, is best fitted to administer the great industrial movement. He is the one who, on the whole, can most wisely lead and most effectively carry forward the business interests of the United States.

In order to get a fair field for our discussion, in may be just as well promptly to clear away certain difficulties. Let me say at once that certain boys should not go to college. Boys who dislike study should not go, for they are in peril of becoming social rebels and pessimists. Boys who can not bear freedom should not go, for they are in peril of becoming slaves to unworthy habits. Boys who are lazy should not go, for they are in peril of adopting a soft, luxurious life, which it is difficult to throw off and which ill becomes the hard worker in the workaday world of the new America.

Of course, the number of boys of these three classes is not small. The going to a college is not a question touching the mass, it is a question touching the individual. Whether the son of a family should or should not go to college, is a question as personal as was the question whether the parents of that son should in the first place become husband and wife.

It is also evident that certain business callings demand a technical training. This training may be given, in part at least, through a college of liberal learning, or it may be given through a technical or scientific school. The work of the engineer, civil, mechanical, electrical, demands such a training. This training is as necessary to the engineer as is the training in law to the lawyer, or in medicine to the physician. Whether the engineer, before taking his technical studies, should first have the advantage of a general college course is a question which does not immediately relate to the present discussion, although be it said in passing that opinion is coming to favor the view that the technical school is purely a professional school.

The present discussion, moreover, does not concern the general advantages of a college course. These advantages, in the form of making desirable friendships, promoting a high type of the gentleman, inspiring one to nobler service for society and the state, no one seeks to depreciate. They are great. Even were there no other results, they would make the college course worth while to most men. A graduate who entered the cattle business, in which, too, he was not successful, says of his college course:

> "I think I am safe in saying that if I had the decision to make over again I should take the college education. It may not make great returns on the investment, in actual money, but to the man who has the taste and determination it makes, I feel, adequate returns in the enlarged field he is given for the pursuits of his life with happiness to himself, and with some benefit to those about him."

Now to the main proposition: The college man in business is worth more than the same man would be without a college education. The elements that go to make up the value of the business man to his business are many; and the elements which go to make

up the value of the college to the student are also many.

First of them all is the intellectual element. The leader in a great business primarily needs, of all the intellectual parts, the power to think. "What do the men whom you employ," I asked the manager of one of the great industrial combinations, "need the most?" "Brains," was the prompt answer. "What do those men lack?" I said to a great manufacturer of steel and iron products. "Accuracy, the power to take a large view and to investigate thoroughly," was the reply. The merchant and the manufacturer are called on to analyze and synthesize phenomena, to relate fact to fact and truth to truth, to assess every fact or truth at its proper value, to determine the significance of evidence, to reason logically, to relate principle to rule and rule to principle, to trace effect to cause, to distinguish the essential from the accidental, and to hold the necessary and essential under a large variety of conditions and circumstances.

These are the very intellectual qualities which the college is supposed to discipline.

The knowledge which one gains in college is of no or small consequence. In fact, knowledge as an end is vastly overestimated in all educational judgments, and knowledge as a means to power is as vastly underestimated. Two friends of mine have recently said to me, in answer to my question regarding the good of a college course to them, that it consists in the cultivation of the primary intellectual quality of thinking. One says:

> "College training teaches one to go to work at any task with system and method, in the consciousness that one has acquired the ability to *think* through, quickly and logically, the questions which come up"; and another says: "College training has enabled me to appreciate more fully and to practise more diligently precision and system. Unless I am very much mistaken the close of my academic life finds me much stronger from the point of view both of synthesis and of analysis."

The men now placed at the head of great industrial corporations believe that this intellectual quality is of large value. Mr. W. F. Merrill, long associated with the New York, New Haven & Hartford Railroad Company, says:

"It has been my experience that men with a college education make better help than men of about the same caliber who have not had that advantage, when they get to a point where their experience warrants putting them into advanced positions; and that it does not take them so long a time to get to a point where they can be safely promoted. A college education gives a young man habits of study and application which are invaluable. He learns how to use his brains to better advantage than one who has not had that training. You might just as well say that an apprenticeship is of no value to a man who is going to follow a particular trade as to say, in the case of a man who is going to use his brains, it is not an advantage to him that he should learn to use them logically by study. Brains are capable of development the same as muscles, and there is nothing that I know of that will develop brains any faster than systematic study. A well-trained mind thinks more quickly and reaches results more speedily and more accurately." [1]

In the personality therefore of the individual student the chief effect resulting from the college is intellectual, and the chief element in this effect is the increase in what, in a comprehensive and general way, one calls the power of thinking. But this is not

[1] The Utility of an Academic Education: An Investigation, by R. T. Crane, p. 27.

the only effect. Intellectual elements do not alone constitute the causes that promote the prosperity of the individual or of the community. Some would say that volitional, emotional, ethical elements constitute causes more important than the intellectual. It is certainly true that a strong will makes as much toward the advancement of one or of all as a clear intellect. For in a strong will are embodied ambition, diligence, persistence—qualities of superlative worth. Some would also say that an honest conscience is as important as either clear intellect or strong will.

Now, the training of the will in the college is a thing much more difficult to accomplish than the training of the intellect. For the will is trained by doing, and doing is not the primary function of the college, though it is one of its functions. This inability of the college to train the will in adequate ways is the chief cause of the impression that a college education is of no advantage to the business man, the man whose life consists so largely in doing things. But let no one suppose that the college does nothing in the training of the will. Every effort

of the student to master a scholastic problem is an act of the will. Every decision he makes for better or for worse is an act of the will. All co-operative endeavors of college men, and such endeavors are numerous and of great variety, represent the executive function. Not a few men in every college class get larger training for their will than for their intellect.

But now reverts the question of intellectual relations. Let it be granted that the modern business man does need the power of thinking. How does the college increase this power more effectively than business itself?

Thinking is an art. It is, of course, also, a science. But for the college man it is primarily an art. An art is learned by practising it. Thinking is, therefore, learned by thinking. It represents habits of intellectual accuracy, discrimination, comparison, concentration. Such habits are formed by being accurate, discriminating, and by the actual concentration of the mind. A course in education promotes such thinking better than a course in business. For education represents orderliness and system in intel-

lectual effort. The effort proceeds by certain graduated steps, from the easy to the less easy, from the difficult to the more difficult. The purpose is to train in the valuation of principles, which underlie all service, and not in the worth of rules, which are of special and narrow application. The man trained only in business of one kind is not fitted to take up business of a different kind. The broadly trained man is prepared to learn business of any kind, and if business of one kind has been learned, he is able to leave it to take up work of another kind without difficulty. The practise of any art should make the one who practises this art a better thinker in it; but this advantage relates in a large degree to one who has first approached the art through thinking.

I suppose it may be said that the man who is self-educated is usually very narrowly educated. He is educated along and in certain lines. He is educated, so to speak, tangentially. His thinking, too, is usually tangential. It lacks comprehensiveness and a sense of relations. It has force, and the endeavors which spring out of it are forceful; but breadth is sacrificed.

Many and of much variety are the methods adopted to relieve the individual of the necessity of educating himself. Schools of correspondence and evening schools have their place, and for not a few their place is large. So thoroughly worthy are these forms of education that they should be promoted, their weaknesses eliminated, and their points of strength conserved. But the peril against which one is to be on guard in these more or less informal methods is the peril of substituting knowledge for thinking, information for personal inspiration, formal content of learning for large power of achievement.

These perils inhere alike in the more popular and informal methods of education and in that technical and commercial education which the individual gets in business. The education of the college and university seeks to avoid these perils. The university offers opportunities for reasoning and for thinking of all kinds, degrees, orders. It sets forth the exact reasoning of the mathematical sciences—sciences in which things are as they are, as Bishop Butler says, and must be as they must be. It thus confirms

the habit of intellectual conviction. It sets forth the general reasonings of language, literature, history, and philosophy, in which truth is to be separated from truth for seeing each more clearly, in which truth is to be united with truth for establishing both more firmly. It uses analysis and synthesis. It uses deductive reasoning and inductive reasoning. It recognizes the uncertainties attending intellectual judgments; a recognition which fixes a habit of intellectual humility. It seeks to assess each fact at its proper value, to use right methods of intellectual procedure, to maintain each faculty of man's whole being in the performance of its proper function, without interference from other faculties, and to bring forth a well-ordered character as the consummate result.

In this endeavor the content of knowledge plays a less important part than is commonly believed. Content of knowledge for intellectual processes is somewhat akin to content of food for physical processes; the purpose is not to retain the content, but to convert the content into health and power. In the intellectual relation, too, as in the

physical, one's appetite is a pretty good guide for the selection of content. Certainly no other guide is so good, or so little unworthy, unworthy as at times it may prove to be. To choose certain courses of study in college because one does *not* like them, on the ground that the dislike represents a certain lack of nature which these studies may help to fill, may have a certain degree, though small, of reasonableness. Such choices are medicines. Medicines are necessary, if one be sick. But the mind of the college man should be treated as if it were in a state of health. It, therefore, needs, not medicine, but food. To choose courses of study in college because one does like them, represents the hygienic process of assimilation which results in strength, health, growth.

It will usually be found, too, that studies thus chosen are most directly preparatory to one's probable calling in life. For the desire which determines the choice of studies also determines the choice of a vocation. President Eliot writes of his son, Charles:

"He arrived at the end of his Senior year without having any distinct vision of the profession which

awaited him, neither he nor his father having perceived his special gifts. Nevertheless, it turned out, after he had settled with joy on his profession, that, if he had known at the beginning of his Sophomore year what his profession was to be, he could not have selected his studies better than he did with only the guidance of his likings and natural interests. He took during his last three years in college all the courses in fine arts which were open to him; he subsequently found his French and German indispensable for wide reading in the best literature of his profession; his studies in science supplied both training and information appropriate to his calling; and history and political economy were useful to him as culture studies and for their social bearings."[1]

The college course which Charles Eliot took was on the whole a broad and a broadening one. It was not so broad that it became thin or a means of intellectual dissipation. The broad course is always in peril of becoming a little thin and the narrow course of becoming constricted. A course can safely to a degree become narrow in case a man knows the channel in which his life is to flow. But most men do not so know. "I am to-day thirty years old; I graduate as a mechanical engineer. I now know I

[1] Charles Eliot: Landscape Architect, pp. 28–29.

do not want to be a mechanical engineer. I want to be a lawyer." So said a student on the Commencement Day of his Scientific School. Ignorance of one's abilities or desires or opportunities should lead one to a broad course of study in the college. Even many of the great manufacturing corporations prefer the liberally to the technically trained graduate. Said a member of a great corporation which builds steel mills round the world:

> "The man of liberal education is, on the whole, worth more to us than the man of technical training. He is worth less for a year or two after coming to us, but he has a power for learning all branches of our business which is of great value."

The peril of over-education, for those who are to enter business, is a peril in the existence of which I find not a few "captains of industry" believe. By over-education is meant an education of the intellect which fits the individual to do a higher work than is actually open to him, or a higher work than his other faculties fit him to do. The point at which this danger touches the college relates to the equilibrium of personal

forces. The college may draw too heavily on the intellectual resources of the individual. Strength, which in the course of his college career he should have given to the will, the conscience, the heart, the body, may have been given to the intellect. As a result, the graduate may come forth from the college halls bearing a mind disciplined to think, but lacking the power of body or of will to use this disciplined mind. He is like an engine, perfect in every part, but without sufficient steam. Mr. S. R. Callaway, formerly president of the New York Central Railroad, writes me that a friend of the late Commodore Vanderbilt bore to him from Lord Palmerston a message that it was "a pity a man with so much talent had not the advantages which education gives." "You tell Lord Palmerston from me," said the Commodore, "that if I had learned education I would not have had time to learn anything else." It is a story beneath the humor of which, says Mr. Callaway, although himself in favor of the general principle presented in these pages, "lies more or less reality." The peril of the over-education of the intellect is simply the peril

of the under-education of the will, of the conscience, of the heart, of the body. This peril is to be avoided not so much by lessening the education of the intellect as by increasing the education of the body, the heart, conscience, and will. The members of the British cabinets of the last twenty-five and more years illustrate the advantage of a well-proportioned education. All have been, with hardly an exception, graduates of either Oxford or Cambridge; not a few have been honor men. One never forgets Gladstone, or Peel, with his double first-class. But besides whatever intellectual power they possessed, they have been men of great strength of body, and of distinct force of will. Unique strength of character has not segregated them from their fellows. They have been at once commanders and servants, men and gentlemen, golf-players and thinkers.

Business of every sort requires men of power: power of intellect, to think; of will, to do; of conscience, to do right; of heart, to appreciate; of body, to originate and to endure. Some men possess these manifold powers more largely without a liberal educa-

tion than other men with a liberal education. But the purpose of the college is not to make men equal, but to develop each to his utmost capacity of development. As a rule, both the ablest men and the men not ablest by nature would become still more able by reason of a liberal education. This is the meaning, I take it, of Professor Elihu Thomson, who writes saying:

"The boy who does not go to college enters business life earlier, gets an early start, and perhaps loses less of the power of adaptation to his surroundings. The older a man is, the less pliable he becomes; but men differ very widely in this particular —some crystallize very early, others only in advanced age. Nevertheless, I *do* think that in the great majority of cases whatever disadvantage is at first suffered is more than made up in the end. I can see no reason why higher education should prevent or lessen success in business affairs, which success depends upon good judgment and energy. In manufacturing, and I think to an increasing extent in most business undertakings, a training which leans toward the scientific and technical will, I believe, be of the greatest value. This involves mathematical proficiency in greater or less degree; not mathematics as an abstraction, but in relation to the concrete realities."

And another says:

"If a young man forms no bad habits during his college course, he can well afford to invest four years' time in return for the college friendships, and, more especially, the taste for reading, for study, and the higher and better things of life; and if he accomplishes no more than acquiring such tastes, his time will be well spent in the pleasure and satisfaction that he will receive throughout his life, and in his ability, when he is able to do so, to retire from active business, without feeling that he can enjoy nothing but business. A young man of ability, strong, tactful, determined to succeed, will succeed, with or without a college education; and if he has to work his own way through college so much the better for him, for he starts with a distinct advantage over his fellow-students. Such a young man as I have described will soon overtake those that started in business four years before he did, and his mental training should give him a marked advantage over those that have not received it."

This question of the value of a college training to the man entering business I have discussed simply on the narrow basis of the commercial service. Of course there is another basis, and one which some would call more important. One of my friends speaks of a college course as fitting one "better to discern and like all that is noble and beautiful in life"; and another: "Col-

lege education ought to make him a more reasonable man, and to increase his capacity for enjoyment throughout life." These are values in themselves; and, if one were inclined to urge the point, one could show that these values have also commercial worth. One also may be allowed to say that if civilization is to advance, it is to advance, not simply through the selfward tendency of the individual and of individual effort, be that tendency either material or intellectual or ethical, but also through altruistic movements. One likes to quote Burke's words: "Society is a partnership in all science, a partnership in all art, a partnership in every virtue and in all perfection." It is a partnership including generations yet unborn. As one reflects on the condition of the present age, as one reflects on the life of the future centuries, one realizes that the higher life of the whole race has claims upon those who live in the first decade of the twentieth century. That chief claim is to make large men.

This discussion is made forceful by liberal extracts from a few of the many letters written to me by the heads of great business

corporations touching the value of a college training. The first which I submit is from Mr. Hugh J. Chisholm, president of the International Paper Company:

"I regard a man equipped with a college education, two years' technical and two years' law-school training, as the best-equipped material to build upon, if he is entering into and expecting to follow a manufacturing, mercantile, or banking business; and, after a man trained in this way gets the practical knowledge of the business in which he engages, he has a better combination of qualities than the man possessing knowledge acquired from practical encountering or conducting of any of the above referred to lines of business, whose education is confined to that which he has received from the high school. The very serious objection, however, to acquiring such a college education as outlined above, is the time it consumes, assuming that it takes from four to six years as the shortest time possible to so equip a young man. The boy who leaves the high school and commences at once from that point to get practical knowledge of the business or commercial life, has certainly an advantage later in life when he encounters the college graduate who is just commencing his business career, and by the lack of this practical, technical knowledge, the college graduate is handicapped when brought in competition with the young man who has devoted his time to the learning of the business into which he may have entered.

But, assuming that they both possess equal mental and physical ability, in the four or six years following, the college graduate ought to excel the young man whose education has been confined to the high school. In my judgment, the college presidents of the present day have no more serious problem to intelligently and practically work out than that of properly establishing a course of studies in the great colleges of this country, which will take into consideration how best to educate and equip that portion of their students who intend to follow a commercial calling rather than a profession, realizing, as every thinking man does to-day, the great demand that has been created for the highest type of intellectual ability, integrity, and executive ability, necessary to manage successfully and honestly the great amount of capital that has been and is being concentrated in the large industrial corporations of this country."

Mr. John W. Dunn, president of the International Steam Pump Company, says:

"I believe that the theoretical foundation which a young man receives at a well-conducted college can be of great use to him in after-life, provided that on leaving college he is willing to begin at the bottom of the ladder to learn practically any business he may choose to enter upon, without bringing with him any false idea that the learning that he has acquired from his books and his professors absolves him from going through precisely the same course of practical

training that he would have had to undergo if he had gone directly from high school to a shop or factory. We have in our various companies a number of young men who are graduates of the various technical institutes, and whom we are willing to assist in making their way, provided they are content to begin as common operatives, like any ordinary working-man who is to earn his living. To any young man who is content to take up his work in this frame of mind, I believe that a professional education will be of great value after he has thoroughly mastered the practical details of his work, and familiarized himself with those matters which can only be acquired by actual experience, and by actual contact with business and with men. Any young man, however, who is imbued with a belief that because he has gone through college he has nothing further to learn, and is superior to the necessities which those who have had no such advantages are compelled to recognize, will find that his college education is not only of no benefit to him, but is a positive hindrance to his success in life."

Mr. J. Ogden Armour, of Chicago, through his secretary states:

"That, in his opinion, the solution of this question, as far as commercial success is concerned, is not so much one of the abstract value of advanced education, as compared with that obtained in the public schools, as it is of adaptability to the chosen

pursuit of the student. He, of course, recognizes the very great value of a complete education, but he thinks it to be largely measured, in relation to success in commercial affairs, by the trustworthiness, ambition, and perseverance that accompany it. With these fundamental qualifications, and others which naturally suggest themselves, opportunities for a successful career would unquestionably occur. Mr. Armour's action regarding employees in his own business is practically wholly independent of the possession by them of exceptional educational advantages. He does not, however, desire to underrate the desirability of the highest education possible, but thinks that commercial success is chiefly dependent upon qualifications which may or may not accompany exceptional scholastic attainment."

Mr. Powell Stackhouse, of the Cambria Steel Company, says:

"I hold that a young man of proper physical and mental balance cannot be overeducated. In the manufacture of steel (and the same is true of any modern manufacturing operations), a thorough technical education is an essential, as without it a limit of advancement will sooner or later be reached. In the commercial line it may not be so essential, but is a great advantage. It is true that there are many notable men who, without the advantages of a technical education, have risen to the top of their profession; these are the exceptions in many thousands,

and are only such as have the natural ability, coupled with great perseverance and the self-denial afterward to educate themselves, and they can not be raised as objections, but as an incentive to a thorough college education. It does not follow by any means that because a young man has passed a college life with credit, he will necessarily be a success in any line he may select. He has only been furnished with the mental tools to work with, and their after application depends upon his use and the opportunities thereby afforded. Any failure of a young man to secure the most advanced education he possibly can must in some time of his future life operate detrimentally."

Such witnesses I might continue to summon. But I refrain. I do, however, wish to call another witness, who is usually supposed to be opposed to the men who are to undertake great business affairs going to college. I refer to Mr. Andrew Carnegie.

There is reason to fear that injustice has been done Mr. Andrew Carnegie. The injustice is not lack of appreciation or ingratitude. The whole American people, and many individuals of its eighty millions, are grateful to him for his manifold labor of love. He is indeed a prince, and more than a prince, in beneficence. But the in-

justice does consist in a failure to appreciate what are Mr. Carnegie's real views about the worth of a liberal education. It is usually supposed that Mr. Carnegie is opposed to the college as a means of training men for business. To be sure he has given good ground for this supposition. Yet he has also given other and better ground for the assurance that the education offered by the college may prove to be of great worth to the manufacturer and the merchant.

In an address[1] given to the students of a commercial college at Pittsburg, in 1885, Mr. Carnegie said:

> "Look out for the boy who has to plunge into work direct from the common school, and who begins by sweeping out the office. He is the probable dark horse that you had better watch."

Four years after in an address given to the workmen at the dedication of the Carnegie Library, at Braddock, he said:

> "In my own experience I can say that I have known few young men intended for business who were not injured by a collegiate education. Had they

[1] This and the following extracts are from Mr. Carnegie's Empire of Business.

gone into active work during the years spent in college they would have been better educated men in every sense of that term. The fire and energy have been stamped out of them, and how to so manage as to live a life of idleness and not a life of usefulness has become the chief question with them. . . . The point I wish to make is this, that, except for the few, who have the taste of the antiquarian, and who find that their work in life is to delve among the musty records of the past, and for the few that lead professional lives, the education given to-day in our colleges is a positive disadvantage."

Later, in the New York Tribune, in 1890, he wrote:

"The almost total absence of the graduate from high position in the business world seems to justify the conclusion that college education as it exists seems almost fatal to success in that domain."

Anything more direct and explicit than this it would be hard to find in the definition of certain deficiencies of the college.

Yet in 1896 Mr. Carnegie, addressing the members of Cornell University on "Business," uses the following language:

"The graduates of our colleges and universities in former years graduated while yet in their teens. We have changed this, and graduates are older, as

a rule, when they enter upon life's struggle, but they are taught much more. Unless the young university man employs his time to the very best advantage in acquiring knowledge upon the pursuit of which he is to make the chief business of his life, he will enter business at a disadvantage with younger men who enter in their teens, although lacking in university education. This goes without saying. Now, the question is: Will the graduate who has dwelt in the region of theory overtake the man who has been for a year or two in advance of him, engaged in the hard and stern educative field of practise?

"That it is possible for the graduate to do so also goes without saying, and that he should in after life possess views broader than the ordinary business man, deprived of university education, is also certain, and, of course, the race in life is to those whose record is best at the end; the beginning is forgotten and is of no moment. But if the graduate is ever to overtake the first starter in the race, it must be by possessing stronger staying powers; his superior knowledge leading to sounder judgment must be depended upon to win the race at the finish. A few disadvantages he must strenuously guard against, the lack of severe self-discipline, of strenuous concentration, and intense ambition, which usually characterize the man who starts before the habits of manhood are formed.

"The exceptional graduate should excel the exceptional non-graduate. He has more education, and education will always tell, the other qualities being

equal. Take two men of equal natural ability, energy, and the same ambition and characteristics, and the man who has received the best, widest, most suitable education has the advantage over the other, undoubtedly."

Mr. Carnegie also characterizes a sound and liberal education as " the most precious possession."

Eleven years have passed since the address was given to the students of the commercial college, and seven have passed since the address was given at Braddock. Either the lapse of time or the change in the character of the audience, or the change in the environment has dulled the edge of the opposition to a liberal education. But even in the Braddock address are found intimations of a liking for certain elements which help to constitute a liberal education. The " reading of the masters in literature " is urged as an important duty. And is not the reading of the masters a serious part of a college course? Insistence is also had on the study of economic questions. For, as he says:

" In these days of transition and of struggles between labor and capital, to no better purpose can

you devote a few of your spare hours than to the study of economic questions. There are certain great laws which will be obeyed; the law of supply and demand; the law of competition; the law of wages and of profits. All these you will find laid down in the text-books, and remember that there is no more possibility of defeating the operation of these laws than there is of thwarting the laws of nature which determine the humidity of the atmosphere or the revolution of the earth upon its axis."

Are not such principles, principles which the college seeks to interpret and to apply?

But Mr. Carnegie expresses his belief in the value of technical education, and also in rather a broad type of technical education. He tells the Braddock workmen that

"The value of the education which young men can now receive can not be overestimated, and it is to this education, as given in technical schools, to which I wish to call your attention. Time was when men had so little knowledge that it was easy for one man to embrace it all, and the courses in colleges bear painful evidence of this fact to-day. Knowledge is now so various, so extensive, so minute, that it is impossible for any man to know thoroughly more than one small branch. This is the age of the specialist; therefore you who have to make your living in this world should resolve

to know the art which gives you support; to know that thoroughly and well, to be an expert in your specialty. If you are a mechanic, then from this library study every work bearing upon the subject of mechanics. If you are a chemist, then every work bearing upon chemistry. If you are at the blast-furnaces, then every work upon the blast-furnaces. If in the mines, then every work upon mining. Let no man know more of your specialty than you do yourself."

He also says, in 1890, in a letter to the New York Tribune:

"There has come, however, in recent years, the polytechnic and scientific school, or course of study, for boys, which is beginning to show most valuable fruits in the manufacturing branch. The trained mechanic of the past, who has, as we have seen, hitherto carried off most of the honors in our industrial works, is now to meet a rival in the scientifically educated youth, who will push him hard—very hard indeed. Three of the largest steel manufacturing concerns in the world are already under the management of three young educated men—students at these schools who left theory at school for practise in the works while yet in their teens. Walker, Illinois Steel Company, Chicago; Schwab, Edgar Thomson Works; Potter, Homestead Steel Works, Pittsburg, are types of the new product—not one of them yet thirty. Most of the chiefs of

departments under them are of the same class. Some young educated men have one important advantage over the apprenticed mechanic—they are open-minded and without prejudice. The scientific attitude of mind, that of the searcher after truth, renders them receptive of new ideas. Great and invaluable as the working mechanic has been, and is, and will always be, yet he is disposed to adopt narrow views of affairs, for he is generally well up in years before he comes into power. It is different with the scientifically trained boy; he has no prejudices, and goes in for the latest invention or newest method, no matter if another has discovered it. He adopts the plan that will beat the record and discards his own devices or ideas, which the working mechanic superintendent can rarely be induced to do. Let no one, therefore, underrate the advantages of education; only it must be education adapted to the end in view; and must give instruction bearing upon a man's career if he is to make his way to fortune."

Most men, I am sure, assent to these judgments and sentiments. The value of specialization, on both its negative and positive side, and the value, too, of an education in principles as opposed to the value of an education consisting of rule of thumb, or rules of thumb, all do appreciate.

It is at this point that one can enter into the consideration of the principles which

underlie Mr. Carnegie's conception of the worth of education.

There are two forces which construct the whole ellipse of Mr. Carnegie's philosophy of business success: They are will and judgment. He believes in the "indomitable will." All those habits of thrift which he eulogizes arise from a strong and good will. Honesty and honor, too, are volitional elements. Such also is concentration. "The question of questions: Is he honest and true? . . . Gentlemen, this is the crucial question, the keystone of the arch; for no amount of ability is of the slightest avail without honor." And also "that indispensable quality—judgment."

Now, when one seeks to reach the basis of the objections of Mr. Carnegie to college men in business, one finds it, at least in part, at this point: The college man lacks a strong will. For he says of graduates, "The fire and energy have been stamped out of them, and how to so manage as to live a life of idleness and not a life of usefulness has become the chief question with them." One is inclined to agree with Mr. Carnegie to an extent. The disadvantage to which the col-

lege subjects its students is the disadvantage of training the intellect at the expense of other faculties. Education is, or should be, fivefold or sixfold: it should give the student a body strong and supple; an intellect able to think; a heart to love; a conscience for righteousness; an imagination to appreciate the beautiful; and a will strong to choose. Into each of these faculties or functions, the intellectual process enters to a degree; into each of them, too, the volitional power enters. But we know that the intellect may so draw on the volitional element in character that its own volitional force is specifically weakened. In the case of certain college students this result does occur. They become flabby and soft. They were flabby and soft by nature, and college has rather accentuated the natural weakness. But I wish to deny at once that such a result, the result of weakness of will, is a natural or inevitable result of college training. It is no more the characteristic of a college course than killing workmen is characteristic of the process of making steel. Men are killed in making steel; students, too, have the force and energy of manhood

depleted in college; but neither process is characteristic.

The result, too, of the decline of the force of will is far less characteristic than it used to be. The whole elective system works against the decline. The combination of the college course and the professional school course is against the decline. The whole athletic movement is mightily against it, both in the sports themselves and in all arrangements prerequisite to the sports. The whole life of the undergraduates, as undergraduates, in societies, fraternities, and clubs, is against it.

The other of the two forces which Mr. Carnegie eulogizes as necessary for the triumph of the individual or of democracy is judgment. What he says, in places many and under conditions diverse, is worth quoting:

"Without judgment a business man amounts to nothing"; "you will find that the one that failed, lacked judgment; he had not calculated the means to the end; was a foolish fellow; had not trained himself"; "and he has shown that he has also that indispensable quality—judgment"; "now what may be claimed for business as a career is that the man in

business is called upon to deal with an ever-changing variety of questions. He must have an all-round judgment based upon knowledge of many subjects"; "if without sound, all-round judgment, he must fail"; "these improvements and inventions come from the educated—educated in the true sense—and never from the ignorant workman. They must come, and they do come, from men who are in their special department men of more knowledge than their fellows. If they have not read, then they have observed, which is the best form of education. The important fact is that they must know; how the knowledge was acquired, it matters not. The fact that they know more about a problem than their fellows and are able to suggest the remedy or improvement, is what is of value to them and their employer."

At length have I made these extracts for they are of great significance. They give evidence amounting to proof that sound judgment is the chief intellectual quality which Mr. Carnegie believes is required in business. Of course, it is, one might add. Who ever doubted it?

But the signal significance of this conclusion lies in the fact that the training of a sound judgment is the supreme intellectual purpose of the college. Of course, its purpose is not *cram*. Knowledge is not

its final cause. Knowledge, learning, books, teaching, are all means, methods, or conditions for creating and for disciplining a sound judgment. Ask a hundred men graduating of what intellectual value the college has been to them, and the one comprehensive answer given, of course, under a multiplicity of forms, will be the training of the judgment. The college teaches the student to assess a fact at its proper worth, to relate truth to truth, and truths to truths, and from the two truths or the many to infer a new truth. Discrimination, analysis, synthesis are at once causes and results of its manifold discipline. The college offers an education, as Cardinal Newman so nobly declares, "which gives a man a clear conscious view of his own opinions and judgments, a truth in developing them, an eloquence in expressing them, and a force in urging them. It teaches him to see things as they are, to go right to the point, to disentangle a skein of thought, to detect what is sophistical, and to discard what is irrelevant. It prepares him to fill any post with credit, and to master any subject with facility. It shows him how to accommodate

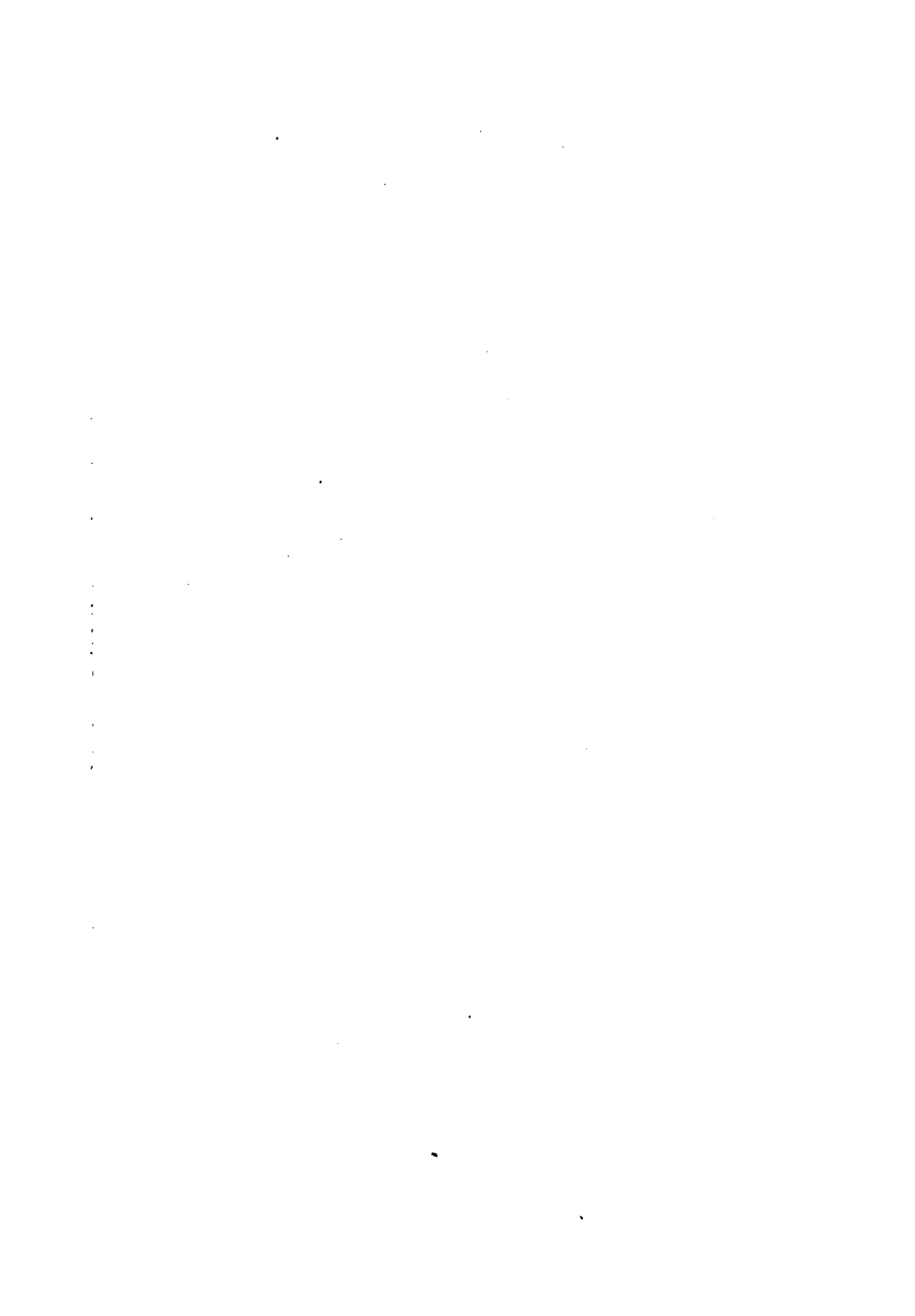
himself to others, how to throw himself into their state of mind, how to bring before them his own, how to influence them, how to come to an understanding with them, how to bear with them."[1]

Mr. Carnegie believes that the quality of judgment is the great intellectual need of the business man. The training of men of sound judgment is the highest intellectual purpose of the college. It has none other: no purpose less high or less broad could be at all worthy of either the college or of humanity. Its purpose is in a most practical way to train thinkers in industrial affairs. The thinker in industrial affairs is not simply the captain, he is the general. Managers who can think, the college is making. They are of the type who Mr. Carnegie says "never do any work themselves worth speaking about; their point is to make others work while they think." The making of the thinker is the highest intellectual result of the college.

[1] Idea of a University, p. 178.

II

IN BANKING



IN BANKING

THE work of the banker is simple, plain, easy; the business of banking is elaborate, complex, difficult. The ordinary service which the ordinary employee of the ordinary bank renders is a service which a good graduate of a good grammar school should be able to render with ease. This service consists largely in keeping books. Its processes are arithmetical. Its duties are not difficult, and they are learned by doing. No college education is needed for doing such work.

But in its large relations banking represents the business of the world. A bank is the clearing-house of all kinds of manufacturing, commercial, financial processes and concerns. The debtor and creditor class meet in a bank. The material results of modern civilization—its foresight, wisdom, struggle, triumph—are most significantly embodied in a bank. The material reservoir, too, from which the material forces

of the civilization of the future can be most effectively drawn is a bank. The intimations of impending disaster are here first felt. The methods for thwarting financial blasting and mildew, or for escaping financial tornadoes, are here elaborated; the methods, too, for lessening the damages which these disasters may have already wrought are discussed and decided in a bank. The reciprocal relations of all forms of business, the relations of the people to the Government and of the Government to the people, the relations of social class to social class, find their microcosm in a bank. Before France and Austria go to war, their financial representatives consult the bankers; and the terms of peace are determined at least somewhat, and may be essentially dictated, by the bankers of Paris, Vienna, Berlin, or London. When Mr. Matthew Arnold wrote that he had bought some Spanish, Italian, and Turkish stocks in order to keep his interest in modern history alive, he could have been assured that the same essential and comprehensive result might have been secured by his buying a few shares in a great bank.

Therefore, whether it is expedient for the young man who proposes to be a banker first to go to college depends largely upon his conception of the work which he desires to do in and through a bank. In case he is content to be a good bookkeeper, or an accurate teller, he will not find a college education of special worth to himself; in case he desires to be a banker of large relations, he will find a college education, I venture to say, of very great value.

The primary intellectual element in the value of a college education to a banker, as to most men, lies in the enlargement and enrichment of the power of thinking. A college education develops, or at least aims to develop, the power of seeing, of reasoning, of judgment, of comparison, of appreciation. The graduate is supposed to know truths, or what is more, to know truth—to know truth through knowing truths. He is able to have a comprehensive notion of his work. He sees the relation of part to part, of each part to the whole, and of the whole to each part. Its elements of strength and of weakness, its points that require emphasis and elaboration, its points

that require no care, its adjustments and readjustments, its progress and regress—these and many other parts he is to consider. Financial schemes which have the substance of the " South-Sea Bubble " he is to distinguish from undertakings that are as solid as the Treasury of the United States, or the Bank of England. Such discriminations, in advance and on *a priori* grounds, it would seem to be easy to make: for a large gulf divides the counterfeit from the genuine, the inevitably disastrous from the assuredly triumphant. But experience both recent and remote, proves that not only the ordinary body of the American people but also that part of it which is not ordinary becomes easily and disastrously confounded in respect to financial theories and movements. The fact is that money represents one of the most difficult problems to which the reason of man ever gives itself. Trained in and through general studies, trained in and through economic subjects, the college graduate, becoming a banker, is often and distressingly mistaken; but he would be mistaken with greater frequency and severer distress were he not a graduate.

Many bankers have written me regarding the advantages and disadvantages possessed by the college graduate in entering the business of banking in comparison with those possessed by the graduate of the high or grammar school. Among the great advantages possessed by the college graduate alluded to by many of my gracious correspondents is the comprehensive advantage of a larger intellectual training and discipline. Mr. A. B. Hepburn, vice-president of the Chase National Bank of New York, says:

"The young men who come to us later in their teens, after graduating from the high schools and grammar schools, make excellent clerks—among the best we have. They are devoid of self-consciousness, go to the foot of the ladder unhesitatingly, are bright, keen, alert, and become competent and efficient clerks. Some of them, of broader capacity and ambition, study their surroundings and endeavor to master the principles of the business as a whole in which they form but a cog in the wheel, and in the course of time develop into capable, efficient executive officers.

"College graduates possess no disadvantages in comparison with high school or grammar school graduates as bank clerks, except perhaps the necessity of overcoming their sense of self-importance. Like all others they go to the foot of the ladder and are

compelled to work their way up through the grind. Some of them seem to feel a sense of impropriety in being put to work alongside of boys of fifteen. The later work in college is considerably removed from the active mathematical computation and the intellectual work that bank clerks as a rule are called upon to perform, so that the college graduate requires some time to become as expert in the mathematical work imposed upon him as the graduate of the high school, whose later years of study involve the very work his business calls upon him to employ.

"These two disadvantages overcome, the advancement of the college graduate is much more rapid. He is older, has learned to concentrate his thoughts, has a better and more efficient control over his intellectual faculties, has a broader and deeper foundation, and is bound in the end to far outstrip the high school graduate of equal ability and application. I would unhesitatingly advise any young man who contemplates a banking career to graduate from college before taking up banking if his means and opportunities will admit of his so doing. At fifty years of age he will find himself much further advanced in the business world than he would have been without his college training. In the matter of contact with other men, either personally or by correspondence, a college education is invaluable. It opens opportunities to a man all through his business career, and other things being equal, his superior education would give him preference in the selection of a person for official responsibility."

Mr. Seymour Dexter, president of the Second National Bank of Elmira, New York, says:

"The college graduate will more quickly comprehend the specific work he is engaged in. First, how should it be done; second, its relation to other work in the bank organism. If the work bring him in contact with customers of the bank, his broader education and experience and touch with men will improve the impression which he makes upon those with whom he comes in contact. He will more fully comprehend the relation of the bank and the social organism in which it is conducted. He will more readily grasp and seek to understand the whole subject of banking, better understand the positions above him and the work to be done, and may be more rapidly advanced to larger responsibilities if opportunity occurs. He is not liable to become the mere machine in the discharge of his clerical duties."

An officer of the Union Savings Bank and Trust Company of Cincinnati, says:

"When I was a boy at high school, my neighbors and those who took an interest in me suggested that I be sent to college. When the matter was brought before my father, he said that if I intended to follow a professional life he would urge me to do the same, but if it was my intention to follow a business life, he would not approve of it, and this impression

was general at that time. I think, perhaps, A. T. Stewart, the large merchant in New York, was more responsible for this impression than any other one man at that time. It was said of him that he claimed the more a man knew of books the less he knew of business; but, after a life experience in business, I should say by all means have the young man go through college if he intends following a business life. I believe the future business man (and the banker is made of the business man) is to come out of our colleges, but do not understand me to say that a banker can be educated in a college. What you want to find in a banker is administrative ability, and this, to my mind, is best made by experience in a successful business life, but the education that a boy would get in college would assist him in grasping such knowledge as experience would give him much quicker, than if he did not have the college education."

These extracts are examples of what many bankers have written me, and are interpretative and confirmatory of what I am trying to say, to wit, that the clerical work in a bank does not require for its doing a college education, but that the work of a banker, considered in its large relations, is vastly aided by the training which a college gives to responsive and responsible students.

One may be allowed to allude to an inci-

dental advantage which the college man in a bank enjoys—an advantage which is indeed incidental to a degree, but one which in many instances proves to be of great worth. I refer to the acquaintances which are formed in and through the college. These acquaintances represent the choicest part of the community. They represent the men who, twenty-five years out of college, are to be the promoters and supporters of the great financial and other movements of the time. Members of the class of 1880 of Harvard College have carried forward some of the most important undertakings of New York and Boston, of the last five years. To form and to retain such acquaintances many a banker struggles hard and long. Such acquaintances belong naturally and easily to a good college man. Of the opportunities which they fittingly open he is able to avail himself.

The disadvantages under which the graduate entering the banking business labors are chiefly three: (1) he begins his apprenticeship three or four years later; (2) he is in peril of not being willing to drudge; (3) he is liable to lack a certain me-

chanical swiftness, or dexterity, in dealing with figures. To these three points I wish to allude.

Of course the graduate begins three or four years later than the graduate of the high school. The high-school graduate enters the bank at the age of eighteen, the college graduate at the age of twenty-two. But it is to be said at once that the college man soon overtakes and soon passes the high-school man. Of course it is presumed that the two are of equal ability. Of course, too, it is to be recognized that there are men, having a college education, who have less intellectual power than high-school men not having a college education. A college does not make brains; it is supposed only to improve brains already made. But the argument is clear and solid that, in case the college man has as great intellectual ability as the high-school man, he will soon make up for lack of experience, experience which the high-school boy has gained, and having made up for this lack, he will soon go ahead of him, and will continue going ahead of him by constantly increasing lengths. He is able to put a better-trained brain into his

work. He is able to foresee, and to see. He is able to do certain things without ever having learned to do them. As two of my correspondents remark:

> "The college graduate ought to have a mental training that would enable him more readily to comprehend the more difficult questions liable to be presented. He ought to learn more quickly the details of the work from his habits of study. His larger experience with men and the self-dependence acquired at a large institution ought to give him more confidence in transacting business with the public. A college man has lived in a little world, has sharpened his wits, has had the stimulus of competition, has learned to use his faculties, knows something of his relative ability, and ought to outstrip the high school boy."
>
> "The mass of bank clerks have had few advantages, they gradually and painfully acquire proficiency which would come more quickly to the man who had learned to use his brain to the best advantage. With equal capacity and industry, I should say the college man in five years would outstrip the high school boy with his three or four years' experience."

The objection is further made that the college graduate is unwilling to drudge. He feels himself, it is said, above the duty

of beginning to climb at the bottom of the ladder. Of the age of twenty-two, bearing an academic degree, he is not willing to do these simple duties or humble tasks which the high-school boy of eighteen may delight to do. Of course there are college men of this sort. One, however, hears of them a great deal oftener than one meets them. I believe their number is vastly exaggerated. The college trains the student to do whatever he is called to do. The record of the college men who entered the army, in both the great civil war and the Spanish, proves not only that no men were more brave on the firing line, but also that no men were more faithful in doing the drudgeries of camp duties than the college men. If it is fitting for the graduate to sweep the bank, he will sweep it, and sweep it better and quicker than the ordinary man. I know a former Harvard student of high rank who through ill health has become a hedger and a ditcher. He tells me he can dig ditches far better by reason of his college training. I know of a Yale graduate who is working as a section-hand on the Pennsylvania Railroad. But he will not work there long. The

charge so often made against the college man that he is not willing to drudge is essentially a false one. The college man is willing to do whatever is his duty.

The third disadvantage under which the college graduate labors is the inability to attend to certain arithmetical or semimechanical processes with the dexterity of the high-school boy. Mr. L. V. F. Randolph, president of the Atlantic Trust Company of New York, and who has for fifty years been engaged in banking, writes, saying:

"I have noticed that the average high school boy is able to spell and write about as well as the college graduate; that his figures are as plain, and that his accuracy of computation is as satisfactory. It may almost be said to hold good that, within certain limits, the younger a boy applies himself to figures the better he does with them; and I have found youngsters from the high school quite as apt at the composition of business letters as college graduates. This might not hold good as a rule; but I fear that there are so many cases in which no positive advance in such knowledge as is useful in banking is made at college, that the general argument would be in favor of taking the apprentice in banking at an earlier age, and giving up the college course."

This disadvantage the college graduate does labor under. He may, of course, overcome it, at least somewhat. But one may as well confess that the college does not aim at making good computers.

The worth, therefore, of a college education to most men, who propose to become bankers of large relations, seems to be evident, provided that conditions be fairly favorable. Among these conditions is one, which several of my correspondents name, of peculiar significance—the cost of an education should not be made too great. Many families give themselves distress through excessive economies in order to educate a son. The son who is willing to accept of an education under such conditions proves himself to be unworthy of an education. He should work his way largely or entirely through college. The boy who lets his mother pay for his cigars by taking in washing, or even the boy who lets his mother pay his fees for instruction by taking in washing, does not hold out promise of becoming a useful banker or a good laundryman himself. The Treasurer of the United States writes me, saying:

"I have seen a father scrimped in his comforts, a mother and sisters toiling early and late to the peril of their health, to send a favorite son and brother to college, with the result of pampering him and weakening his self-reliance and sturdiness."

Unless the boy, the son of a family of great poverty, can go through college without laying a burden on the family, he had usually better not go. But thankfully be it said, he can go through without laying this burden, in case he be worthy of an education.

This discussion I wish to close by making long extracts from two letters written by two conspicuous men: one the president of the First National Bank of Chicago, and the other by the Treasurer of the United States. Mr. Jas. B. Forgan, of Chicago, says:

"In answer to your first question, 'What are (*a*) the advantages, (*b*) the disadvantages, possessed by a college graduate in entering the banking business, over those possessed by a graduate of the high school or grammar school?' my answer would be that I do not know of any advantages that the college graduate would have over the high school graduate, nor do I know of any disadvantages, except that he would be starting in his business career later in life and would have to do the drudgery of an office-boy

after he had acquired an education that might lead him to consider himself above work of this kind. I am not a college graduate myself and can not therefore say what effect a college education might have had on my business career. I had a good high school education, which qualified me for entering college had I desired to do so. I have never felt that my education has been deficient for anything required of me in my business career. My experience with those who have come into the bank under me after having had a college education leads me to believe that they learned nothing that was of any special benefit to them in their business career from their college course. . . . I think that the elementary education obtained in the primary and high schools of this country is deficient in grounding the pupils in writing, arithmetic, grammar, spelling, and composition. I think the colleges, if they were to give special attention to it, might in a two years' course give a young man an education after he has graduated from the high school along lines that would be of special benefit to him in a business career, but so far as I know none of them have yet made this departure from the beaten track of classical education. . . .

"A man has ample time and opportunity in connection with his business career to develop his mind along educational lines such as suit his fancy and such as are not absolutely necessary in his business, so that if his career in life is to be that of a business man, he had better get to work as soon as he has got the groundwork of an education that will enable

him to do so, and develop his mind by study along lines of literature, art, or the classics during his leisure hours as a pastime."

Mr. Ellis H. Roberts says:

"You present the man as already decided to enter the banking service, and ask what advantage for such an occupation a college training will confer upon him, and what disadvantages he will suffer in consequence of it. The delay in entering upon his chosen vocation, and in earning a salary, is in my opinion the chief factor on the negative side; but there is also a tendency on the part of college-bred youths to shirk the drudgery of the details essential to the discipline of the thorough banker. These are real disadvantages.

"They seem to me more than counterbalanced by the broadening influences of college studies and the mental culture which rightly used develops powers of analysis, investigation, and judgment. The college graduate who will not do the work at hand, will be worth little; the conceit which may set him above the details of his trade is personal and not chargeable to his education. He must know that his classmate who went into the bank when he started to college is three or four years ahead of him in the office routine; he ought to be even more in advance in power of thought and knowledge of principles and grasp of the forces which control individuals and society. The youth who goes to the bank from the high school will the sooner be eligible

to become a teller; he who brings to the bank the discipline and knowledge and culture of a college ought the sooner to be fitted to become chief of a division, and cashier, and general manager.

"But the personal equation can not be neglected. Whatever their education and training, some men can never rise above the counters and the journals and the ledgers, while others will master the larger tasks of administration and credit, of exchange and currency, of loans and investments.

"With the limitations thus hinted at, a friend may well advise a boy of eighteen, of intellectual habits, of apparently efficient administrative abilities, to go to college from a high school, rather than to enter the banking business at once.

"Yet we must recognize the conspicuous fact that very many of the bankers most successful, certainly in the routine of their profession, are not college graduates. Nevertheless, although generals have been developed without the benefits of military schools, all nations act on the theory that education, broad and generous, is the surest condition of the highest usefulness in the most trying fields. The best banker, measured by the noblest standard, will be the man who with the amplest capacities has them best disciplined, and fostered by varied culture, and who can thus look through and all around the most difficult problems."

The question which has been discussed has had relation to the college graduate be-

coming a banker. It has no relation to the larger question of his relations as a citizen. It has no relation to the range of his own enjoyments or to the development of his own personal character. Those personal and larger relations are, of course, most significant and essential. In these respects, I suppose, no one can question for a moment that the college, whether it does or does not aid a man in making a living through banking, does aid him in making a large life for himself and for the community.

III

IN TRANSPORTATION

IN TRANSPORTATION

I SUPPOSE that in all the current discussion regarding the function of the college no one questions but that the college education does aid one in being or becoming a gentleman. I suppose, also, that usually it is granted that a college education does aid one in being or becoming an efficient member of society. The exceptions to these two principles are so infrequent that one may eliminate them from the discussion regarding the worth of the college. But the general advantages which are supposed to accrue through a college education do not touch, in the view of certain good and wise persons, the fundamental question of the advantages or disadvantages possessed by the college graduate who enters business as a life career. Touching the question of the worth or the worthlessness of a college course as a preparation for business, no more vital method of discussion can be arrived at

than one which shall make an appeal to the question of railroad service. For the railroad service is the largest field of the employment of labor, and also it represents and unites several diverse kinds of labor, as financial, executive, legal, and mechanical.

It is not to be denied that there are disadvantages placed upon those who enter the railroad service after the completion of a college course. One of these disadvantages arises from the environment which the college is supposed to represent. The college represents to most men an atmosphere of leisure, of wealth, and frequently of the extravagant, unwise use of wealth. These disadvantages, of course, touch those entering any form of service as well as those entering the railroad. The general manager of the Atchison, Topeka & Santa Fé Railway Company says:

"Unfortunately a majority of the young men who pass through college are financially able to live on a scale which they can not hope to do in railroad service and are apt to contract expensive habits, and few of them are willing thereafter to begin railroad work at the very bottom, or if they do, find the work too irksome and do not persevere therein. This, in

my judgment, is the principal reason why so many prominent railway officials come from boys of moderate education and particularly from boys who begin the work while very young."

The more obvious disadvantage springs from the time, later by four years, at which one is able to begin the railroad service. These disadvantages are direct, positive, and plain as the alphabet.

"If he desires to enter railroad work, and is eighteen years of age, he won't have time to go to college if he desires and expects to reach the top before he dies. Consider that it takes an average of over thirty years' actual service to make a railroad president, which, of course, is considered the top of the ladder, so no time is to be wasted if the top is to be attained."

Thus writes the general manager of the Boston & Albany Railroad. The president of the Ann Arbor Railroad says:

"The college graduate is at a disadvantage compared with the graduate of the high school and the grammar school for this reason, that he has usually spent from three to five years of his life at college and consequently is that much older and has less opportunity of improving himself in the branches

that would fit him for railroading or any other commercial business."

The president and general manager of another road says:

" Should the high school graduate, however, enter the service directly after graduation he would have at least four years' advantage in practical experience at the time the college graduate would enter the service, and in my judgment the college graduate would not be equal to the high school graduate until he had at least five years' practical experience."

The disadvantages arising from the later time of entering the railroad service is at once to be recognized. Apparently the man who enters the railroad service requires five years to catch up with the high-school graduate who entered the same service four years before. When the high-school graduate has been working on the railroad nine years and the college graduate five they would be relatively at the same point of attainment, provided that they were of equal ability, and were possessed of equal opportunities.

A third disadvantage one should not pass over, and this lies in that condition of

human nature which is inclined to depreciate advantages richer than those which oneself enjoys. Prejudice does exist still among many railroad people against the college graduate. Lessening of prejudice is going on, but it is not yet wholly eliminated. Uneducated, surly officers and fellow workmen are not disinclined to make the condition of the college graduate harder than it ought to be made. This interpretation I get not, of course, out of my own experience, but I am simply repeating the testimony of railroad men themselves.

A fourth disadvantage should not be omitted. This disadvantage lies in the arrogance and cockeyism of certain college men. One of course emphasizes the word certain, for cockeyism or arrogance is not the prevailing characteristic of college men, any more than it is the prevailing characteristic of humanity itself. But some college men are cockey. The general manager of the Grand Trunk Railway system says:

"A college education, I believe, leads a young man, on entering railroad service, to think that he 'knows it all'; of course, theoretically, he may, but any one that has such an idea rarely succeeds, as the

practical knowledge of all branches of railroad work is far more valuable than theory."

College men are usually willing to begin at the bottom of the ladder and climb up step by step if this be their function. I know of a graduate of Harvard College who wished to learn the business of making steel. He, with other men, was directed to shovel coal into the boiler furnaces. His pay was larger than was usually given for work of the sort. At the time he received his first month's pay, he was asked how he liked his job. " I have nothing to complain of," he remarked, " but I wish to ask you one question—why is it necessary for me to keep shoveling coal in order to make steel? " " For you to learn the business of making steel you must learn how coal behaves when it is in the fire; you can in no way learn how coal behaves so well as by shoveling coal into the furnace."

The typical college man is willing to shovel, if shoveling be his function.

These four disadvantages which I name, soft environment, time, prejudice of officers and workmen, and arrogance in oneself, are

disadvantages touching more or less strongly the college graduate who enters the railroad service. The summing up of the advantages and disadvantages is very well made by the general passenger agent of the Minneapolis & St. Louis Railroad:

"At the present time civil service rules are so generally observed, except perhaps in the professional branches of railroad service, such as the legal, medical, and engineering departments, that it is usually quite difficult for a young man to get an opening except in the lowest grades, consequently the boy who begins with a high school education at, say, seventeen, will by the time he is twenty-three be much further advanced than the young man of twenty-three, who entered on leaving college at twenty-one, and if we allow that they are of equal mental and business capacity the boy who started at seventeen will always remain in advance, hence it seems fair to conclude that the four years between seventeen and twenty-one will prove to have been more profitably spent in gaining experience in the rudiments of the business than at college. The observation applies to boys who are depending solely on their own merits for advancement. Where sufficient influence can be commanded to effect an entrance above the lower grades of service, in my opinion the time and money spent in obtaining a college education will prove to have been well in-

vested. The men who have made the greatest successes in the railroad field have generally been men without much schooling, but with great capacity for the absorption of knowledge, tireless workers, honest, faithful, and efficient in the discharge of their duties, men who would make themselves felt anywhere, not born into the railroad business, but getting there by chance, have improved every opportunity, and overcome every obstacle, rising by sheer force of ability to a point where they attract the notice of the management and then later of the capitalists, who are always in search of tried men in whom to repose confidence and responsibility. And this vantage-ground once gained, the pathway to greater honors is much easier. After all, it is the man and not the years spent at school that tells, and perhaps in the class referred to the struggle of obtaining an education by reading and by observation while performing their daily work is just the kind of exercise best calculated to develop the remarkable characteristics which they bear. Many doubtless fail because of lack of school education who either do not possess the physical strength or the disposition to make the close application necessary to acquire it by themselves. I have known many worthy boys who remained stationary simply because their learning was so deficient that they could not be advanced without detriment to the service or injustice to themselves."

I now wish to present a few out of many testimonies given me affirming that a col-

lege education is of advantage, and usually of great advantage, to one who purposes to become a railroad man. A principal officer of the Atchison, Topeka & Santa Fé Railway says:

"On the whole, I would advise a boy of eighteen to take a college course before entering railroad work, provided he feels satisfied that he will still be willing to commence at the lowest round of the ladder and persevere in the work as thoroughly as he would have done had he commenced it four years earlier. He must make up his mind that he will have to put in years of hard work, a portion of the time in a very menial position, before he can aspire to a prominent position."

The president of the Lehigh Valley Railroad says:

"Railroad work, as all other work of a similar character, has reached that point in its development where the man who has the best trained mind, other things being equal, has the greatest chances for success. If a boy is so situated in life that he can continue his studies after graduating at a high school, by taking a course through college, it will be decidedly to his advantage in the end. What seems to be needed at this time in young men who decide to follow railroad work as their career, is not so much any special knowledge as it is a thoroughly well-

trained mind, which will place them in a position where, through their subsequent experience, they can assimilate knowledge and ultimately be capable of producing correct results."

An officer of the Southern Railway Company says:

"I am a stanch believer in education in its broadest sense, and I would infinitely rather have any young man in whom I am interested possessed of a college education and thrown upon his own resources at that time, than to have him start on his life's work earlier and with a small capital at his command which, being controlled by one without experience, might be easily lost and not available when there has been acquired the experience to properly control it. The boy himself will, I think, discover the wisdom of this later on. One of the strongest arguments, I think, in favor of a college education for a young man is the fact that most, if not all, successful business or professional men who have themselves been deprived of the advantages of a college education insist upon their own sons enjoying the advantages which were denied to them, and recommend strongly the same course to any young man in whom they have an interest. As your inquiry refers to the material side only, I have refrained from speaking of the subject in a larger sense, that is, having reference to the many advantages that are incident to a college education in the development of refined and cultured tendencies, the love of reading

and the higher things of life generally, as well as the development of the capacity to enjoy and to be resourceful, and the entering into friendships which are life-lasting and invaluable."

The president of the Michigan Central Railroad says:

"The transportation business of this country is becoming more and more every year an exact science, and the advantages of a college education in disciplining and developing the mind can not be overestimated. I believe that in the future, as a rule, the managers of the different railroads in this country will prefer to employ young men who have obtained a thorough collegiate education, rather than those who have not gone beyond the limit of a grammar or a high school.

"My advice to a young man who desires to enter the railroad service would be, after he had finished his course at a high school, to take a course of three or four years at some scientific college, and while this would seem to put off the day when he would enter the railroad service, I am satisfied that in the end, all other things being equal, he will rise to a higher plane than if he had not obtained such an education."

A vice-president of the Chesapeake & Ohio Railway says:

"The years of mental training that the college graduate has secured will enable him to accomplish

more in a shorter time than is possible for the young man who has not had these advantages; and everything else being equal, I think that the college graduate in the end will be more successful in any class of business than the young man who enters service after a common or high school education."

The same officer of the Chesapeake & Ohio Railway adds:

"The chief officers of a railway company need the training and the perfect command of the action of the mind which a collegiate course is supposed to, and I believe does, afford. They must be able to deal with and contend with the best trained intellects in the country, and to do this it is proper that they should have all the advantages of a complete education. I therefore think that any boy aspiring to a chief position in a railroad should go to college if he can; it will help him. Many can not go, and still by strenuous effort reach high places, but in such instances they have a full realization of the difficulties they have contended with."

The president of the Wabash Railroad says:

"To *enter* any of the other departments, a college education is not necessary, but if the young man has the right sort of material in him, he will be advanced, and as he reaches the higher positions he will find that his college training, if he has had the advantage of it, will be of great benefit to him. On

the whole, I am decidedly of the opinion that a man with a college education has the advantage of one without, not only in the railroad service but in any walk of life, and socially as well, and I would say to any young man that if he has an opportunity to secure a college education, he should take advantage of it, no matter whether he expects to become a railroader, to enter one of the professions, or to adopt a mercantile career."

These statements which I quote at length, and other statements which I should be glad to print, express or intimate certain principles or elements of character. One of these elements refers to the being and power of the boy himself. One might say all depends upon the kind of boy who goes to college; all depends also upon the kind of boy who enters the railroad service. The general superintendent of the Fort Worth & Denver City Railway Company says:

"Primarily it can be stated that whether or not a college education would be of any assistance to a young man would depend largely upon himself. In railroad business, in almost any department, there is undoubtedly room for young men of good education, but with it they must have a desire for the class of work they have selected, or rather the work that is found in the department to which they have gone,

and a willingness to start at the bottom of the ladder and perform what might appear to them to be unimportant duties with the same degree of care as would be exercised in the higher branches. Railroad business requires assiduous application on the part of the employee, and success will depend largely on how well he may do his work, his ability for organization and administrative capacity, and to master the details of the work assigned. In the mechanical and engineering departments, a great many technical questions come up that could be quickly solved by a young man with a college education if he had applied himself in that direction. A college education perhaps is not essential to one's success in the railroad business; but any man possessing the same, with opportunities to succeed in railroad business, would, I consider, be doubly equipped."

Mr. Marvin Hughitt, president of the Chicago & Northwestern Railway Company, says:

"Whether it be to the disadvantage of a young man to devote the time necessary in obtaining a collegiate education, in preference to going at once into railroad or other work, depends to a very great degree, if not wholly, upon the 'make-up' of the young man. And in the consideration of the advisability of the one course or the other, this question of the kind of 'timber' a young man may be becomes a most important factor, in my judgment, in reaching a con-

clusion, considered both with regard to his school life and to his discharge of the duties pertaining to whatever line of work he may undertake; for one young man's mental equipment may be such, as compared with his fellow-worker, that when he has finished grammer or high school he will have reached a point in mental discipline and training that many of his co-workers can only hope to reach at the end of a thorough college course."

One boy is better fitted to take up life and work on his graduation at the high school than is another boy on his graduation at college. Much depends not only on educated power, but also on the *morale* of the boy himself. His regard for the cardinal virtues has as great value as his respect for the cardinal verities. Moral honesty is as important as intellectual honesty. The love and practise of justice is more elemental than a sound intellectual interpretation of the origin and nature of justice. One boy who never goes to college may, by reason of his intellectual and ethical power, reach a far higher place than one who does go. Nature did for the one who finished his education with the high school more than both nature and the college did for the other.

But of course the proper method is not to compare man with man, but to compare man with himself. The question is not whether a college education will make one man more efficient than another man, but whether it will make any man more efficient than he would be without a college education.

In these remarks, too, is found a certain general inference to the effect that the value of education lies in the securing of a trained mind. I may be suffered again to say that a trained mind is a mind trained to think. The railroad presidents, and managers, and superintendents who are most valuable are the men who can think. One of the railroad managers of the Northwest had a somewhat unique experience. The railroad of which he was superintendent was sold. The purchaser visited him in his office. He found him before a desk covered with papers, writing or signing letters. The purchaser remarked, "Mr. W——, you and I will not get on together." "Why, sir?" "Because you are so busy with your correspondence that you have no time to give to me. I don't want a man writing letters or sign-

ing them about ordinary business. For labor of that sort I can get a man for a thousand dollars. I want you to be free from this business and spend your time thinking about improving the efficiency of this railroad." The superintendent took the hint. The next time the owner of the road came to see him he was in his office, his desk clear of papers, apparently doing nothing, but really doing much and most. The power which the great railroad men of this country possess is that power which the railroad system of this country opens every opportunity for using, the power of thinking. Be it said that this is the power which the American college is ordained to develop.

An important question emerges at this point. Should the education which the railroad man is to receive be a general college education or a technical one? This question is part of a still broader question whether a man should enter into his study preparatory for his profession immediately upon the close of his high-school or academy course. The lawyer, the minister, the doctor pursues his professional study after his college course. The engineer, in all the various lines

of engineering, usually makes his undergraduate course and his professional course identical. The technical school is supposed to take the place of both the liberal and the professional course. In general, if a man can afford the time, I am sure it is well for him to take up his technical course after his course in liberal education. But the expense in both time and money is great. Without entering into a discussion of the question, I am confident that it is best for a man proposing to enter the railroad service to enter the regular college; but while pursuing his course in the regular college to give to this course a scientific or technical relation. Let him, for instance, make a special study of physics, chemistry, geology, economics, and sociology. Such studies pursued in a college of liberal arts and sciences will prove to be at once liberalizing and also sufficiently professional.

The history of the administration of railroads of the United States is the history of a development. In the beginning the management of railroads was committed to their owners. This form of administration gave way presently, and administration was car-

ried on by those who had been trained in actual service. At the time of this form of administration legislators aroused themselves to the problems touching the public wealth which the railroad had created. Strikes also arose and resulted in the destruction of valuable railroad property. For meeting such conditions practical men had little or no knowledge. There arose a demand for men who could take a large view of the problems presented by the railroad service, and who could do much, through their power, for the solving of these problems. At this period of the development the college man was called into the service.

There can be no doubt, I think, that the problems created by the American railroad are increasing in number and difficulty. The need, therefore, of the properly and nobly trained mind in the solving of these problems is to become yet more and more urgent. Mr. Frank Trumbull, president of the Colorado road, says:

"In my opinion the time is near at hand when the untrained boy, with moderate capital, will have a smaller relative chance for success, and the scientifically trained young man will be more in demand than

ever before in the world's history; this because of the natural growth of combinations of capital and labor, and the impossibility of manufacturing or monopolizing brains."

The great need of the trained brain in the railroad service in the near future is also nobly expressed by one whose name I am not at liberty to indicate, but which would be at once recognized as standing for one of the most efficient and ablest of the managers of the great railroad systems. In answer to my question he quotes to me a letter addressed to the principal of an academy in New England in which his son, a boy of fourteen, is a student:

"My own feeling is that as the control of large properties comes to involve more and more technical information, makes larger drafts on capacity for organization, and to be handled not in the process of evolution, as the present managers have come to them, but as a going business—as they must be dealt with in the future—they can only be handled, in the main, by people who have had a thorough training and liberal education. However, I predicate this upon these men being able to begin their actual work at an age when the mind is still plastic and habits subject to change. If a man is not to engage in actual work until he is twenty-four, it would doubtless

be better for him to forego altogether the college education and begin his work at sixteen. I am strongly of the opinion that the colleges of to-day are inflicting a very great injury upon their graduates by insisting upon a course of study that retains them far too long at their books. It is from this point of view that I would consider the loss of a year to ...... as very serious indeed, and one that I would go to a very great deal of inconvenience and some expense to avoid. What I have to look to is not his marks next year, but the training of his mind and the general acquisition of knowledge during the next six or seven years. If, on the whole, he attains a fair average, and has the benefit of the association that comes with that training, I should be quite satisfied. What I have in mind is not that he shall 'reach prematurely any coveted rank,' but that he should, as rapidly as is possible and consistent with the proper training of his mind, pass through the period of study that he has before him."

The significant phrase in this most significant letter is the phrase "going business." Men in the future will take up railroading as it is carried on in vast relations and with vast forces involved. For entering into such undertakings only men of great power and with trained ability to think can hope to attain to the opportunity of rendering large service. Their fathers and their

grandfathers entered into the railroad business while the business was small. They grew in power as the railroad grew in business; the railroad grew in business as they grew in power. At the present time and in the future this method no longer prevails. Men step into this service, as this service itself is progressing, under most complex conditions. No power is too powerful; no brain too intelligent; no vision too clear; no executive skill too great to be received into this service.

In training men, therefore, for the railroad or other business the university should seek to secure results which are embodied in men having these primary and fundamental characteristics: first, the man of sound physical health; second, the man of noble moral character; third, the man who is a gentleman; fourth, the man who, having an education, is able to weigh evidence, to observe, to compare, to infer, to think; fifth, the man of special education, able to apply his general power of thinking to the solution of problems immediately presented in and by his vocation; and, sixth, the man who, having all these powers and finding himself face to

face with opportunities, is willing through hard, diligent, noble work to apply his abilities in doing the duty which the opportunities lay upon him.

IV

IN INSURANCE

IN INSURANCE

If insurance be regarded as a business, it has become the broadest business, for it touches all relations of life. If insurance be regarded as a profession, it has become a most important and serious one, for its problems are the most intricate.

The two earlier and more important forms of insurance, fire and life, are still the most important. The amount of money directly and indirectly invested in them is larger than the amount invested in any other form of human interest. But insurance has gone far beyond covering the risks of fire and of death. What can not we insure these days? To tell what we can not insure were almost easier to tell than what we can. One insures his steam-boiler against blowing up, his plate-glass windows against breaking, his house against robbers, his person against accidents, his honor and honesty and that of his clerks against embezzlement. The so-

cializing of society has gone farther and deeper in insurance than in any other human process or product.

The field of insurance is, therefore, a good field in which to apply two great questions regarding the value of college education. These questions are:

1. What are the advantages and the disadvantages which belong to a college graduate entering the insurance business?

2. Should a boy of eighteen, of good intellectual parts, the graduate of a high school, who intends to enter the insurance business be advised first to go to college?

These questions I have asked of about a hundred of the chief officers of the principal insurance companies in the United States.

Of the replies received thirty-eight have value more or less worthy for the present discussion. Of these thirty-eight, be it at once said, twenty-six affirm that a college education should be taken by one preparing to enter the insurance business, eight affirm that a college education should not on the whole be taken, and four are in doubt. The larger part of those answering are not them-

selves graduates, although several are, and these several usually of Yale.

In dealing with the diverse interpretations which are thus made I can not do better than present extracts from the letters themselves. For the letters are impressive in the liberal and large views taken and in the careful analysis made. First I shall quote largely from a letter of Mr. John T. Stone, president of the Maryland Casualty Company, which deals with the intricacy of the problems presented in one form of insurance as well as with more general concerns. Mr. Stone's letter is as follows:

"Barring such employments as chemist in manufacturing establishments, metallurgists in mining or smelting works, and similar occupations, in which a college or university education is prerequisite, I believe the insurance business calls for a broader training, or at least offers better returns to such training, than any other line of business.

"Perhaps I had better say right here that all these remarks relate to those branches of insurance known as the casualty lines and with which I am familiar; while of the other lines—fire, life, and marine—I know comparatively nothing and do not pretend to speak.

"In the business of casualty insurance there is

room, nay necessity, for the exercise of the very best powers of analytical reasoning and for the application of the broadest information in almost every sphere of knowledge. It is a business that has to do with all other lines of business—manufactures, mines, lumbering, transportation, commerce—and all in an intimate and technical manner. Moreover, some knowledge of law and of the human body is of vast usefulness in it.

"As to your first question, I would dismiss it, so far as it refers to a grammar school education, with a word. No matter what calling a lad may wish or be destined to follow, it is, I take it, a great pity to stop his mental training at the grammar school. When that is done he enters life as heavily handicapped mentally as the prematurely born infant enters it physically. They may both survive and splendidly succeed, but the odds are heavily against them, and their success is in spite of their start and not because of it.

"The high school graduate is very differently circumstanced. He is four years older. Those four years have introduced him to the Latin, Greek, and probably French and German languages. The structure and literature of his own tongue have been studied to some extent. The higher mathematics has trained him to some degree in orderly, analytical thinking. He has made some acquaintance with the sciences of physics, chemistry, and physiology. His intellect has received an impulse and direction toward mental maturity sufficiently continuous and

steady to warrant the expectation that he will keep up the trend of his own choice and effort. He has been at school for, say, eleven or twelve years. He begins to feel the ambition, and desires the self-supporting independence, of manhood. Yet he is young enough to accept without humiliation the lowly position of office-boy at which almost every entrant upon insurance career must start, and to perform its apparently trifling, yet really important and educational, duties without any sense of discomfort or of lowered dignity. And he is young enough to spend the usually unavoidable years of climbing and waiting for the successive promotions that lead to the top, and to reach somewhere near that coveted position before he is too old to enjoy it.

"What advantages will he secure, for an insurance career, if instead of going from the high school into an insurance office, he first goes through college? His introduction to the languages, dead and living, his own and foreign, will ripen into a familiar acquaintance with their literatures, enriching his mind, storing his memory, refining his taste, increasing his facility of oral and written expression.

"He will become capable of reducing a problem to its lowest terms, its last analysis, by reason of the added years spent in the difficulties and intricacies of advanced mathematical studies. His knowledge of natural science, while not yet that of the post-graduate specialist, will be reasonably complete.

"Of what use are these things in the insurance business?

" Again reminding you that I speak of my own branch—casualty insurance—I reply, of the greatest practical use, of real working value, of themselves. Perhaps of even greater service in so fixing the habit and maturing the power of steady, intelligent application, that he who has had those added years of college training will, because of them, bring to the service of his employer, a capability of dealing with the questions of underwriting that must compel recognition and reward.

" But what of his age? That may be and often is a disadvantage at the start. The college graduate must begin, like all other beginners, at the beginning, usually. And he is no longer a boy. He is a man of twenty-two or more. It is disagreeable after the manliness of college athletics, the atmosphere of college society, the free and equal mingling with congenial spirits in the intellectual life of the upper school, to be ' an office boy,' to take orders from other clerks who may be younger in years and inferior in education, or from an employer who may be very slow to believe that much business utility can be had of a college man! Besides, there is always the possibility of over-education, or intellectual snobbishness. The objections first urged will be only temporary. If there be common sense, and a manly, cheerful, teachable doing of the lowly routine duties of the first round of the business ladder, and if the young man has really profited by his college education, he will force recognition and promotion by sheer merit and that right soon. The four years' advantage in the

start possessed by the high school boy, assuming equal natural ability and adaptability, will be more than overcome by the better training and equipment of the college man. In this opinion it is important to note the qualifying assumption. There must be a business instinct, the element of commercial horse-sense, without which the college man will fail in any business, and with which even the grammar school boy is apt to succeed.

"I believe I have, to all intents, answered your second question in the foregoing. But to be explicit I would say that—given an aptitude for business—I would advise such a boy as you describe in it to go to college if he proposes becoming an insurance man, especially a casualty insurance man. But let him never lose sight of the fact that he is only in training for his real life. There are few more pitiable things than the college-bred man in business without business sense, with a fool notion that his education is an end in itself and a title to the homage of his associates. He is a failure from the beginning to the end of his business career, and the distance isn't usually very long."

Advantages of a general character arising from a liberal education alluded to in this long extract are even more fully and forcibly presented in the several letters which follow.

Mr. E. W. Scott, president of the

Provident Savings Life Assurance Society, writes:

"In my opinion the principal factors determining a man's maximum attainment in the insurance profession, as well as in any other, are the industry, natural ability, and force of the individual himself. Oftentimes the man whose education has not included a college or university course, but who may have a strong natural endowment of the qualities essential to success, will outstrip his college-bred contemporary; but, in the long run, I believe that the man with the college education has the advantage in his favor, even if he has to start a little later in life, because he is trained to logical and systematic thought, and has had the advantage of the higher education.

"Then, too, if he has taken advantage of the benefits from the social side of college life, he has a large circle of intimate friends, who, at one time or another, are apt to be of practical benefit to him. The power that a man ought to gain from this less strictly academic side of his college career must count in such a business as insurance, into which enter so largely the strictly personal element, the necessity of understanding men, and utilizing this knowledge.

"I think I may say that the personnel of my own company bears out the opinion that I have expressed. Both in the executive staff of the Provident Savings, and among its managers in the different parts of the

country, we have many college-bred men, who have earned their advancement largely because of their education at our leading colleges, which has given them valuable preparation for practical work."

Mr. James W. Alexander, president of the Equitable Life Assurance Society, says:

"Other things being equal, a college education gives a man a special advantage in entering the insurance business, as it does in other branches of business, because the valuable training he has received fits him to occupy at once a higher and more important position than would otherwise be the case. On the other hand, there are many positions in the office of a life assurance company which are best filled by those who make up for a lack of learning by the business training which they get beginning as errand boys and rising step by step.

"But I take it that your questions are intended to be broad and comprehensive, and if so, the foregoing answers are altogether inadequate, dealing as they do with only a fractional part of the life assurance business.

"It is true that every life assurance company must have a corps of officers and a force of clerks at headquarters, but its real business is the sale of life assurance, and as the business is practised, these sales are effected by agents stationed in all the important cities, who have representatives stationed at smaller places, or who travel from place to place.

These are the men who transact the life assurance business, and they outnumber twentyfold those who occupy office positions.

"To a young man going into this branch of the assurance business, a college training is of infinite advantage. Nowadays the life assurance agent can not succeed if he is a bore, or if he lacks intelligence, or if his manners are uncouth, or if his intellect has not been sharpened by training; and in addition to what the college student learns from books, the knowledge of men which he gains during his college career will be of inestimable value to him. All this is recognized by those who are at the head of our large agencies, and such men are on the lookout for college graduates who are willing to engage in our business, and a number of cases might be cited where young men immediately after graduation have been able to support themselves by life assurance while they have been learning the business; and the start once made, there is no limit to the prospects of a man who has the necessary energy and character. The progress of a small clerk in a large office is usually slow. His horizon is narrow and his opportunities are few. There is, on the other hand, a broad field for the ambition of an industrious young man who takes up what has sometimes been called the profession of life assurance. While the highest intellectual powers may not be necessary to secure moderate success, there is no calling in which every talent which a man can bring to bear may be utilized to better advantage, and of two young men starting

out in life, the one with the college education and the experience of college life has greatly the advantage."

Robert W. Huntington, Jr., president of the Connecticut General Life Insurance Company, gives his opinion in the following:

"I should say that the advantages possessed by a college graduate in entering the insurance business over those possessed by a graduate of the high school or grammar school were:

"First—He should have some knowledge of higher mathematics, which would enable him to get hold of the vital principles of the business much more quickly and more thoroughly than one who had no such knowledge could.

"Second—That if he entered an office with the right spirit he would be able, on account of his superior advantages in the way of former intellectual training, and on account of his increased age, to impress the officers of the company with his intelligence and willingness to a much greater degree than the younger boy could possibly do. And I think that the average graduate of a college enters into business with more enthusiasm, more determination to succeed, and more realization of the value of hard and intelligent work, than the graduate of the lower schools does. Perhaps the two most common hindrances to progress are intellectual narrowness and lack of am-

bition. They usually go together. The right kind of a boy can not graduate from the right kind of a college without having an open mind and high ambitions. And these two qualities combined with what may be called doggedness are necessary to ensure success. It is impossible to hold a good man down, or to push a poor one up, permanently.

" The only disadvantage that I can conceive of which might result from a college education is a self-conceit and a feeling of being above one's work It is not easy to descend from the study of history to the running of errands or ruling red lines with a pen. Yet accuracy and despatch are necessary in these latter things, and by the way a boy performs his small tasks is noticed by his superiors, though he is apt to think that such is not the case. There is an old feeling among business men against the college graduate, in that he is supposed to wish to be president before he knows how to be office-boy. This feeling is fast being dispelled by the conduct of the average graduate.

"An incidental advantage which would accrue to the graduates of many colleges would be the formation of friendships with men in different portions of the country. These friendships in a business which covers as wide a territory as insurance does might be of no little value.

"Referring to your second question, it is very difficult to say whether, on the whole, one would be safe in advising the boy of eighteen of intellectual habits and apparently efficient administrative abil-

ities, who desires to enter any branch of the insurance business, to go to college, as of course there would be particular circumstances which would arise in each case, but I do not question but that if the boy's pecuniary circumstances were such that he could do so without too great a sacrifice, that the return which he would get from his college course in dollars and cents in the course of an average lifetime would be very large indeed."

Mr. Joseph A. De Boer, vice-president of the National Life Insurance Company, writes:

"Apart from the personal factor which invariably affects success in any time of life, the college graduate has the advantage, in entering the insurance business, of a better intellectual training, a greater faculty for independent investigation, a large adaptability to its varied forms of work, a better foundation for the broader problems of its applied management, and what is by no means unimportant, a better opportunity for cultivating and holding important personal connections in all the allied forms of work. I can conceive of no disadvantage, unless it be one of a purely subjective type, arising from the having of a college training, as the insurance business is large and important enough and sufficient of an art, resting upon proximate sciences, to seek for its employment the best thought and the best training to be had."

COLLEGE TRAINING

Mr. John F. Dryden, president of the Prudential Insurance Company of America, says:

"There is first the broad division of the business into field and office administration. In the former, a university education, other things equal, is no doubt a distinct advantage. In some departments, especially in view of the rapid development of the business, higher education is a prerequisite for success. Self-taught men have done excellent work, but they have done so at an almost inconceivable cost of mental wear and tear. In the financial, legal, medical, actuarial, and statistical departments the chances of success are no doubt largely in favor of the college graduate. But natural ability and inborn inclination for specialization are of still greater importance, and without these education in higher institutions for learning is perhaps more of a hindrance than a help.

"There must be a natural inclination for the intellectual life, combined with strong practical common sense.

"The fact to be kept clearly in mind by the student is that a college education can only give a broad foundation for the work of the future and that instead of being finished at graduation it is only then that the real work of mental development, training, and discipline begins. For it is a well-known fact that most valuable results in life insurance have been achieved by men who were self-taught, but such men

were invariably indefatigable workers in the domain of action as well as in the domain of thought. They were men under the influence of high ideals and gifted with a determination indifferent to obstacles and the ordinary hardships of the struggle for success.

"Where these characteristics are present a university education is undoubtedly a great advantage, in that the faculties are properly trained for effective work and a waste of energy and time is usually avoided.

"As to whether it would be advisable for a young man of eighteen to go to college as a preliminary course of training for effective work in an insurance office, the answer is that it would all depend on the special branch of the business selected and the special course of training adopted. While instruction in insurance principles and practise is not now obtainable, except in one or two institutions, a thorough study of economics, social and political science, commercial geography, mathematics, and statistics is an essential requisite for a more effective mental development. The business of life insurance is assuming colossal proportions and every phase of its activity is more or less related to the social, economic, and even the political life of the people. The needs of the future will be much more scientific and exacting in view of the increasing extent and importance of the business, and there will thus arise a demand for the very highest mental and general commercial ability. The right kind of college education must needs be a very considerable advantage to the young man who, with

a clear conception of his life's purposes, makes a deliberate choice of life insurance as a profession or as a business pursuit.

"In the field work of an agent, or solicitor, for life insurance a college education is less of a necessity, but likely to be of valuable assistance to men who intend to make their life a more than ordinary success. Many of our general agents, or special representatives, are university graduates, and in no small measure their success is the result of better mental training and a more perfect mental grasp of the conditions under which success is possible."

Mr. W. A. Brewer, Jr., president of the Washington Life Insurance Company of New York, writes:

"The advantages of the college graduate in entering the insurance business are in general those possessed by a college graduate in entering any business, namely, wider general information, which is always useful and helpful—the ability to reason more correctly—to express oneself more clearly—to write the English language more effectively—to grasp a new subject more successfully; in particular, as regards the life insurance business, a more thorough knowledge of mathematics, and of the first principles of law and at least a fair acquaintance with modern languages, notably French, German, and Spanish.

"The disadvantages are that he is temporarily

four years behind the school boy in knowledge of the petty details of the business: he is therefore often humiliated by the apparent superiority and value to his employers of the latter; but if he has had a college training, he will soon make up the arrearage of four years and in the long run far outstrip his more poorly equipped competitors. I say this with several individual cases in mind to substantiate the statement.

"If the young man's sole aim and object in life is the accumulation of wealth, I doubt whether a college training is an advantage, not as regards himself, but as regards the establishment of his object; the pursuit of knowledge tends to elevate the mind and soul above everything that is sordid and selfish and therefore to a degree diverts one from the pursuit of the 'almighty dollar'; there is, however, a happy medium between one devoted to the latter pursuit and one who, as Agassiz claimed for himself, is so absorbed in the pursuit of science that 'he has had no time to make money.'"

The list of testimonies might be vastly lengthened, but I do desire to add to it a wise and most interpretive letter from Mr. Greene, president of the Connecticut Mutual:

"The answers to your questions depend upon the particular field of activity for which a boy is fitted by natural gifts. The impression is perhaps quite general that education creates intellectual power;

whereas it simply develops that which is in potential existence, trains it to exercise, equips it with knowledge, teaches it how to acquire other knowledge and how to remove friction and hindrance to balanced mental action. But it does not create faculties; nor can it increase them; but it can bring them to their full.

"If your boy has got that breadth and power of grasp and action that promise efficiency in the higher and wider fields of responsibility, give him the best training available. If he aims at general administrative and executive work, a college training will give him the necessary possession of himself, and a knowledge of at least the general principles of law will both add to the ease of mental action and to his handling of daily problems. If he is to deal with the actuarial side of the business, he needs a mathematical training that he can not get in the high schools. He must go to schools of collegiate rank.

"If his capacity does not promise a wider range than that of clerical work, the high school fits him sufficiently.

"If he desires the variety of action found in field work, let him take on whatever of training he thoroughly assimilates. It is assimilation that produces that open alertness and sympathy which is the best result of schooling in any grade. It all depends on a man's capacity to receive mental discipline and enlargement. You don't make a five-foot man a six-footer by putting him into a gymnasium: you can only make him a good five-footer.

"Of course it is not necessary to say that only by giving a boy such and as much training as he fully absorbs can you equip him for taking readiest advantage of those opportunities that will pass before him for wider range, whenever and however he starts in. The latter is not the determining question. It is the stuff in the boy. If you give him more than he absorbs, he will slough it, no matter how much it is nor what he undertakes to do: upon which point and with reference to the curricula of our public schools there is much to be said."

These letters are, I believe, the most significant statements ever made by the leaders in a most important department of American life touching the value of the higher education. They unite upon the central principle that the college aids the man entering the business or profession of insurance to interpret, to weigh evidence, to assess a fact at its proper value, to analyze a complex condition and to synthetize facts and classes of facts which belong together. They also agree in expressing the assurance that the disadvantage of time belonging to the college man may be soon overcome, after which he presently outstrips the high-school graduate. In this relation it may be worth while to add that the Equitable Life

Assurance Society in the summer of 1902 opened a school for agents specially designed to train only college graduates.

There is one special advantage belonging to the college man in insurance, as in every great business, which should not be passed over. In the education of students the teacher notices that certain ones reach their natural limitations sooner or at a less-advanced stage of progress than other students. Further progress may be made, but it is made at heavier costs, and with diminishing returns. The same principle or law holds in business; some men reach a limit of efficiency earlier than others. To go farther means a strain.

This law holds in insurance. The college man reaches his limitations at a period or point of efficiency more remote than that of the less well-educated man. A Yale graduate, now an officer of the Home Life Insurance Company, says:

"I consider a university education as of the greatest value. Ever since my graduation from Yale my time has been occupied in business, and I have had a good opportunity of studying the effects, direct and indirect, of a university education in business life.

The impressions which first obtained in my mind after leaving college have been strengthened in recent years by my experience as an employer. I find that the average young man seeking employment in an office such as mine is eager to succeed, but that after pushing such a man forward from one position to another I soon discover that his limitations are quickly reached and that it is not safe to put him in a position where responsibility is placed upon his shoulders and where his thinking powers are brought into active exercise. Such a man, having reached his limitation, simply falls into a rut and becomes a mere human machine. This class is made up largely of those men who have simply a common school education and who never paid any particular attention to the development of the reasoning faculties required in the more advanced positions. On the other hand, my experience with young college graduates has been that they have, in addition to the qualifications of the first class, a certain power of logical thought and analysis which I attribute to their educational training, and consequently it is possible to use them ultimately in a much higher sphere than the first class."

Similar testimony is borne by an officer of the German Insurance Company, of Freeport, Ill., who says:

"Personally being placed in charge of over sixty office employees and having been connected with such work for over forty years, I find that the work of

those having had only the advantage of the studies in our elementary schools do not compare with those having had more advanced studies; that the former, while competent to perform certain duties, almost invariably fail to advance, whereas the latter are the ones that we can and do use in any kind of work and eventually reach the positions requiring knowledge and exercise of brain power, and which the former seldom, if ever, attain. There are exceptions, of course, but they are so few and far between that they will not establish a precedent or rule."

One would be carried too far afield, and would enter into ranges of educational discussion too professional, to consider the special sort of college training—for there are all sorts—which one should select who prefers to enter this business or profession of insurance.

But I venture to affirm that this education should on the whole be characterized by breadth. The insurance business itself is one of increasing breadth, touching many human relations. The college man should, as executive or administrator, be prepared to take up any one of them and should be able to appreciate the conditions obtaining in all of those relations. If he prefer to

enter the actuarial department, of course he is to be versed in mathematics, up to and including calculus. One of the greatest of actuaries, Elizur Wright, was a professor of mathematics in the old Western Reserve College before he became an actuary. But because of the variety of the forms which constitute insurance, he should seek rather a general than a special education. As says Mr. George F. Seward, president of the Fidelity and Casualty Company of New York:

"A man who is to be successful in insurance is like the man who is to be successful in any other business, he must be capable of taking broad views. The boy who comes into the office of an insurance company at an early age will learn this and that detail, but unless an exceptional fellow, will not progress greatly in the matters of fundamental concern. The college man will be predisposed by his education to make general studies and by these only can any one secure those broad conceptions that are essential in the direction of the business.

"Men find it necessary to do what they can, not what they prefer, and as life goes on to do more than one thing usually. The person who imagines he wants to be an underwriter is quite likely to turn up in a newspaper office, or in the diplomatic service, or in the pulpit. The boy imagines he has aptitude

for certain work. Later he finds his aptitude or his necessities take him in a different direction.

"I may add the general statement that in my judgment education should never be directed in the first instance toward any specialty. The foundation should be laid broadly at school and at college. If, for instance, manufacturing business is to be followed, I would make the course elementary in German, French, mathematics, mechanics, and chemistry for the first three years of the college course and then elective for the last year. A special training for any given thing may be, so to speak, a straitjacket for the individual all his life.

"An elementary broad training fits him to do what he later on finds himself best suited to do or forced to do and to make later those studies in his particular line which must continue for the whole period of his career if he is to be successful beyond the average.

"To my mind, the smaller college which does not differentiate study overmuch, but does provide elementary courses with thoroughness and does bring the students into close relations with the members of the faculty, is better than the great college with elective courses. And the college which takes the young men of the neighborhood and teaches them while they live at home is the most desirable, for there is an education of the affections and on the moral side that parents can teach better than professors and without which a young man is indifferently equipped for the conduct of life, however much he may know of the learning of the schools."

But although a large majority of the leaders in the insurance business of the United States believe in the worth of a college training as giving the best preparation for entering this business, a few do not. Their views I wish to present. Mr. Fuller, of the Boston Insurance Company, says:

"Taking it for granted that the person in question enters the insurance business at the bottom, as he must except under rare circumstances, I should say that he possessed no advantages. If, however, by possession of exceptional opportunities he entered the insurance business, as the saying is, 'through the cabin windows,' the college training would give him the advantage of knowing how to use his brain.

"I would say, that I should advise him not to go to college in ordinary cases, for several reasons. The road to success in the insurance, as well as in any other business, is a long one, and the sooner a boy starts on that road after he is old enough, the better, and the business training strictly in line with his chosen profession would, in my judgment, be of more value to him than the general training he would get in a college. Furthermore, a boy of eighteen would take more kindly to the necessarily low position which all must occupy in starting, than a young man who has used up four or five years more in going through college, not altogether on account of his greater youth, but partly (in some cases, at least)

because he would not have acquired so large ideas of his importance and dignity. It would be perfectly natural that a college graduate twenty-one or twenty-three years old would hardly resign himself to take orders from clerks ahead of him who might be his inferior socially and mentally, with so much grace as a boy four or five years his junior and fresh from home. Please bear in mind always that I am talking of the usual and ordinary course, and in fact, confining myself strictly to answering your questions as you ask them. I have thought of this subject a great deal and realize it is an important one, and I have reached a conclusion, in which a great many of my friends do not agree with me, that there is danger in educating young people above the situation which they must necessarily occupy in life."

An officer of the Sun Insurance Office says:

"On the whole, I incline to the opinion that a boy of eighteen possessing the advantages named would do better to enter the insurance business at once than to take the college course.

"I speak with some experience on this subject, having a son, in his twenty-second year, now a student in the scientific department of one of our leading universities. My desire was that on the completion of his college course he should adopt the law or medicine as a profession, but the bend of his mind at this time seems to be toward finance or insur-

ance. So far as the necessities of the latter businesses occur to me, these last four years will have been practically wasted.

"In conclusion, I may say, that in this office, where we employ between fifty and sixty clerks, the only college man we ever had on our staff was probably our very poorest clerk. His career at —— was all that could be desired, but unfortunately he was unable to get through the earliest stages of our business and ultimately left us to enter the banking business, where, I understand, he has had greater success."

Mr. A. W. Damon, president of the Springfield Insurance Company, says:

"The principal advantage is, a mind better equipped to grasp the problems connected with a complicated business. The disadvantages are confined mainly to those students who imbibe false notions in college, such as that book-learning is more valuable than, or a fit substitute for good common sense, and a dislike for details which must be mastered.

"A high school course is quite essential, but beyond that it depends largely upon the young man's circumstances and desires. If the time and expense necessary for a college course entail serious hardship upon himself or those supporting him, and if he have no decided ambition for a literary or professional career, such a boy as you describe may well enter upon a business career. If he make a failure of it,

it will probably be because of deficiencies which a college education would not remove. Much that is learned in college can be learned outside if a systematic course of reading is adopted and carried out faithfully. A knowledge of mechanics, electricity, and chemistry (the latter because of its bearing upon spontaneous combustion) would be especially valuable."

Mr. E. Y. Richards, of the North British and Mercantile Insurance Company, writes:

"The bearing that a college education has upon the character, attainments, and business success of a young man is a subject in which I have always felt a keen interest. It has been my fortune for some years to occupy a position where it became frequently necessary to select young men as beginners in our business, and I have closely studied the relative merits of the boy with and without a college education as bearing upon his chances of success in fire insurance.

"In the first year or two of service the young college graduate when entering an office is at a disadvantage because of his advanced age as compared with other young fellows, graduates of the grammar or high schools, who have gotten an earlier start, and I have found it takes courage and persistence for the young man just out of college, twenty-three to twenty-five years old, to willingly assume the duties ordinarily performed by a boy of sixteen to eighteen

years. As a rule, such a young man is unwilling to make the attempt, or if starting, is apt to become discouraged; but, if persistent, he rapidly overcomes his early disadvantages, and if possessing the natural characteristics needed for success with sufficient ambition and determination, his success in the business is more rapid and pronounced than his younger competitor.

"I recommend a college education for every young man, if it can be afforded him, whether or not it is his purpose to become a business man, and to the young man with such an education—if his other qualifications are satisfactory—I would give the preference. But he should understand the disadvantages he is likely to suffer from in his first years of business experience and be sure that he has the courage and determination to overcome these minor and early disadvantages for the greater success that is before him."

As one reads these paragraphs, and as one reflects in general upon doing good work in the business of insurance, as in every other form of human labor, one comprehensive conclusion is made evident. The doing of good work depends largely on:

1. Good health; 2. Intellectual ability; 3. Good will and strong; 4. Graciousness; 5. Good manners.

One who possesses these five elements or

qualities should do good work in his business or profession, and should win the results of such work, results which the Philistine world sums up usually in the word "success." For the securing of these five points of a practical Calvinism I believe the college training of three or four years represents the wisest method and is the most effective agency.

V

IN HUMAN RELATIONS

For the sake, therefore, of what is known as success in great vocations, I believe it is usually wise for a boy to go to college. The success which he wishes to win will be finer and probably larger, and, even if delayed in its coming, when it does come, will be greater.

Yet it should be affirmed, as I intimated in the first chapter, that there are boys who ought not to go to college.

"My boy shall go to college even if he can not enter until he is forty years old," said a mother whom I know well and whose son I know well. That boy is now more than fifty years old, and he has not entered college. The reason that he did not go to college is the reason which is usually sufficient to keep any one from going, viz., the lack of intellectual interests. A boy may really have intellectual interests, and yet give to the ordinary observer slight evidence

that he does have them. Some boys develop late. But parents with knowledge more intimate may believe, despite the evidence, that their son has such intellectual abilities and that he should go to college. Happy the parent who has such a true prevision of his son's future! Happy the son who has so true a prophet in his father!

A lad, too, may regard his intellectual interests and conditions not as of worth themselves, but of worth as means to certain pieces of work which he wishes to do. He may desire to become a tanner or a butcher. He knows that these are callings which, in their large relations, demand executive and administrative ability. He knows that their relation to intellectual affairs is not as close as the relation of the profession of the lawyer or librarian; but he also knows he can not properly take up the work of the tanner or butcher without having a certain power of judgment which is a natural result of passing four years engaged in study. The boy, therefore, who looks upon intellectual interests as means and not as ends need not exclude himself from the list of college candidates. Because of his materialistic calling

he should be the more eager for an intellectual life before entering it.

But the boy who has no, or only slight, intellectual affinities and potencies should not think of himself as one worthy of getting or receiving a college education. I know very well that the college contains many elements which can not be described as intellectual. Their value to many students is great. College friendships are precious. The greatest of modern poems sprang out of such a friendship. But if one lack the intellectual relationship and affinity, he is in grave peril of converting opportunities of growth into opportunities of disintegration. The lack of intellectual interests converts the athletic condition from one in which gentlemen indulge to one which professionals adopt. The lack of intellectual interests converts social conditions from possessing an unique academic charm into the ordinary relation of friendship. The presence of intellectual interests lifts fraternities, societies, clubs, and athletics into noble means and opportunities for receiving and for giving the highest things of life. It keeps the campus from becoming a gridiron, and the social

parlors from becoming professional ball-rooms. The atmosphere of Oxford and of Cambridge is something other than merely intellectual. These universities are the mothers of great men and of greater movements. They have inspired poems which will be sung so long as hearts break or hearts melt; they color the period of youth in the retrospect and maturity in the prospect with glories more glorious than richest windows set in college chapel can suggest. But before and behind all these results, the origin and the cause, is the life intellectual. The same primacy of intellectual interest is to belong to the boy who enters the American college. This interest will create other interests, some like, some unlike, the original one, which are indeed precious; but if he lack the intellectual interest he can not hope to secure the other consequent and allied results.

There are at least two types of boys who usually lack intellectual interests to such an extent that they should not think of going to college. They are what I shall call the vain boy and the executive boy. The vain boy is the boy of the empty brain, who thinks

that his brain is full. He is the boy who is so ignorant that he does not know he is ignorant. He is the boy who said, when his father told him he could not go to college: "Well, then, I will have a new suit of clothes." The executive boy is of quite a different type. He is the boy who likes to do things. Blessings on him! He will be of far greater value to the world than many a thinker. But he would find the life of thought and of learning of the college exceedingly dull, tedious, irksome. He should not enter the door of that life. He should be content with sitting down upon its doorstep.

"I am not going to send my son to college till he can say no, and stick to it," said a father. The remark suggests the truth interpretive of the boy of another type who should not go to college. It is the boy who lacks strength of will. Most wills, like steel beams, have a breaking point. I also know that the will may yield once or twice or even thrice and retain its permanent tension and tenacity. But the boy who enters college should have the power to hold firmly the decisions made wisely. For the freshman of

to-day finds fewer helps in rules and regulations for reenforcing the strength of his will than his father and grandfather found. It is possible also he may find less help in the personal associations of his teachers. He is flung into a new world. It is a world of equals and superiors. Being a freshman, he will not be inclined to believe it is a world of inferiors! It is a condition of moral temptations; but it is also a condition of general testing. He is his own man and master as he has not been. His time is his own; he can transmute time into treasures more precious than rubies. He can also transmute it into pestiferous evils. His strength of mind and of heart is also his own —either to use worthily and to increase it, or to use unworthily and to diminish its sum and to degrade its possibilities. Into this condition of moral freedom, so akin to the world of freedom into which God places every soul, is put the college student. If he is a man who needs restraint, supervision, penalties, he should not enter it. If he be at all the type of a man who once had an interview with Dr. Ballou, the founder of Universalism in America, he should not go

to college. " If I believed as you believe," said the man to Dr. Ballou, " I should lie, steal, murder." " Yes," replied Dr. Ballou, " I think you would; you look it." The man who can not do right without fear of penalty should not be in college. The college is no place for moral invertebrates. The only invertebrates which should be in college are the biological specimens; and they are dead.

The appetites are, of course, the source of peculiar temptations to the young man in college, as they are to all young men. These temptations there must be strength of will sufficient to overcome. If there be not sufficient strength of will to overcome them, in the condition of freedom, the candidate for college should remain in his home, where he may have the special advantages of loving personalities and noble atmospheres to support his weak will. The temptation to lie is also a temptation of the college, as of all men. It is a temptation which usually arises from cowardice. The tendency to yield to it is among the hardest of all the inclinations of the college man to eliminate. The man whose will is so weak,

whose heart is so craven, that he lies easily, should not go to college. Where should he go? perhaps some anxious parent may ask. The answer to the question would carry us too far afield, even if any answer at all could be given.

At this point one should not fail to notice that there are colleges and colleges. One boy may have a will so weak that to enter him at college in which freedom prevails would be to invite moral suicide. Another boy may enter the same college and find in it a condition which creates the strongest manhood. The first boy may enter another college, in which, through gentle and wise ministries, he may be nourished from characteristic weakness into ethical worthiness. The second-named boy, entering this college, might find his innate strength disintegrating and the ideals of manly achievement depraved. It would be trying to grow oaks in a hothouse. The question, therefore, whether a boy should or should not go to college is in no small degree a question whether he should go or not go to a particular college. Colleges are not alike, as are spades and peas; col-

leges differ quite as much as, and sometimes I think more than, human beings.

Whether one who lacks health should go to college is a question of degree and also a question of relation. The question of relation refers to the location of the college, and the question of degree refers to the seriousness of the ill health from which one suffers. But it is safe and fair to say that men should grow stronger in body, as they are supposed to grow stronger in mind, while in college. The regularity of the daily intellectual routine, as well as the regularity of physical exercise, taken under proper supervision, and the happiness of the life, should increase strength and promote health. It is also evident enough that men may go to colleges in Colorado or Florida who could not go to college on the northern Atlantic coastboard.

It is also, sometimes, said that the lack of money is sufficient to keep a boy from going to college. Lack of money may keep a boy from going to college, but it need not. Colleges are made for boys of grit, of grace, of gumption, and of poverty, of full brains, and of empty purses. As a college presi-

dent, I am prepared to say that no boy of sound health, of strong will, of pure heart, of good intellect, who has the knack of helping himself, should turn away from the college gate hopeless.

But, after all, the two things to be said absolutely are these: The boy who lacks intellectual interests, or the boy who lacks a strong will, should not go to college. The attempt of a mother or father to send such a boy to college constitutes a grave peril for the boy. The receiving of such a boy by the college constitutes a grave peril for the college, lest its fair name as a healthful, intellectual, and moral force be tarnished.

But when all has been said regarding the type of the boy who better not go to college, and also when all has been said about the reasons urging the boy to go to college in order to become an officer or manager more efficient in the great business of the great world, I find myself unwilling to close this little book without saying one thing more. The thing which I wish to say in these last paragraphs is that a college education is worth while for the sake of the manhood of the man himself. Man

himself is more important than merchandise. Character is more precious than a check-book. A man's heart is of greater worth than his house, be the house a residence or a business. One can interpret life in terms of dollars and become rich. It is well. One can interpret life in terms of intellect and get truth. One can interpret life in terms of will and get force. One can interpret life in terms of heart and get joy or exaltation. One can interpret life in terms of conscience and get righteousness and duty. One can interpret life in terms of the esthetic faculty and get beauty and appreciation. Each of these results is also well. Each of these results is better than wealth. Treasures in oneself are better than treasures outside of oneself. Treasures in oneself are lost only by losing oneself; treasures outside oneself may be torn away. It is well to discipline the character and to enrich the soul by knowing and feeling the noblest which man has thought, experienced, and expressed. It is well to know what have been the problems of man in the successive stages of his development; what methods he has found useful in solving them; and what

results have followed the solution. To lift one out of his own individuality into the sphere of reason; to cause one not only to recognize that he is born under laws, but also to give aid in appreciating the beneficence of laws, and to make obedience to these laws easy and cooperation with them natural; to put one in possession of the accumulated treasures of the race; to help one to know what he is, where he is, what he should do, whence he came, whither he is going, what he may become; to train one to set just values on all treasures, to estimate movements, conditions, forces, at their real value—these are some of the purposes which the college tries to help the student in gaining. To think truthfully, to choose in righteousness and wisdom, to appreciate beauty, to feel nobly, to increase the number and worth of one's relationships and to aid in adjusting oneself to these relationships, to give self-knowledge, self-control, self-development, and self-enrichment, to foster social efficiency, to promote reverence for all goodness and for God, to give graciousness without weakness, and strength without severity, to extend the boundaries of human knowledge, to make

the thinker, the scholar, the gentleman, the great liver, the great doer, and the great man—these are intimations of the large human relations which the college seeks to foster.

Education seeks to make character vigorous without making it harsh or boisterous, patient without indifference, conscientious without being hypercritical, efficient without ostentatiousness, symmetrical and impressive, noble and self-reliant but sympathetic with the less worthy, rich in itself, but without selfishness. The problem of education is not to teach us how to make the bow of Ulysses, that bow is made without difficulty; but it is to create men of strength, of self-restraint, who can bend the bow. The problem is not so much to teach men how to get rich, although that may be important, but how to use riches after it is gained: how to save themselves from being crushed by its responsibilities, from being smothered by its soft pleasures, or torn in pieces by its distractions. The problem is not how to get great honor, place, eminence, but how to bear the responsibilities which great honor always carries along with itself.

Education seeks to make the individual of resource, of the power of initiative, of honesty and honor, in whom the vision of truth is united with the power of doing one's duty, in whom tenderness of heart for the suffering is justly joined with capacity for moral indignations. It seeks to train leaders—intellectual, ethical, religious, civil. It also seeks to lift the whole level of the race to broader and clearer seeing, to finer thinking and nobler appreciation.

At the close of a long period of years from their graduation the members of the class of 1862 of Harvard College met in a formal reunion. The class had and has men of large usefulness and of great distinction. But one of the members, writing of the worth of the education given by the college, not for the men who "are getting wealth, inventing propellers for the bows of vessels, and writing heavy books," but for the common men, notes certain of its great satisfactions.

"There is the field of literature. We don't have to make it if we can't; it lies before us ready-made and inexhaustible. There is no out about this. If life goes

very hard with us, if disappointment and mortification depress us and mock at us, there is some God-given book at our hand, and in the joy of reading it we soar aloft to Heaven."

But a more personal condition of the college times lies in the friendships which are there created. It is probable that more friends are made in college than in all the years following the college period. "The old affections of the college days are among our priceless treasures. There is something very singular about these old class-friendships. I find as I recall those days that I knew very little about the family connections and worldly condition of classmates. My thoughts didn't run that way. What the fellow was in himself was all I thought of, and to this day I am sometimes surprised at a question about the worldly surroundings of some college friend, it seems so odd a question; and then it seems odder still that it had never occurred to me to ask the same question."

In addition to friendships and literature, the graduate writes of the satisfactions derived from the fine arts which, if they do not

have their originating cause in the college, as in certain cases they do, yet are so supported and fostered by academic conditions that their value is largely enhanced. "There is music. Some of the favored ones among you can draw the highest joys of life from the power of musical expression. Others can live an ideal life in the study or practise of the fine arts; and museums, galleries, prints, photographs, and books are growing always more accessible to us all."

The Harvard graduate further says, in conclusion: "I have hinted at a thousand joys and consolations of our maturer life. You would arrange them in different order, but I know that I have named something that is precious beyond words to every one or other of you. But I know, too, that I have failed so far to speak of things that many of you prize as the highest consolations in the afternoon of life." [1]

The results in personal character and condition, therefore, are the richest and the best. These results the college secures in manifold ways. The studies of the course

[1] Harvard Graduates' Magazine, September, 1902, pp. 27–30.

represent one method. Linguistic studies train discrimination and interpretation; scientific—the power of observation; mathematical and philosophical studies — the power of abstraction; historical studies—the quality of comprehensiveness; economic studies—the power of analysis and synthesis; and all literary studies—the power of appreciation. Each set of studies trains those qualities of character which every other set trains, but also each set trains certain powers in particular.

But associations and associates may do more than text-book and teacher for the student. The college is the place of great friendships. The great Darwin once wrote to Dr. Hooker that love is far more than scholarship or fame. Jowett, Master of Balliol, was a noble scholar, but he was also a great friend. It is said of him that "although the genius of Swinburne, the ever-active brain of J. A. Symonds, and the vigorous individuality of John Nichol were largely independent of his teaching, they yet owed to him what was more valuable still, the blessing of a friendship which never wavered, which gave unstinted help at crit-

ical moments both in youth and after-life, and would make any sacrifice of leisure and of ease to serve them." [1]

Out of such friendships with teacher and fellow student, and out of the other conditions of academic life, there enters into the student what I shall call the atmosphere of moral thoughtfulness. Moral thoughtfulness is a mighty need of our age. The age is a thoughtful age upon things material. The age is also more moral than any age the world has known. But the age is not an age reflective upon ethical truth. It is not seeking to grasp life's problems in their more fundamental relations. Neither does it seek ways and means for solving these problems. The moral thoughtfulness which the age lacks the college nourishes. It was said of the pupils who came from Rugby to Oxford, while Arnold was master, that they were thoughtful, manly minded, conscious of duty and obligation to a degree which the ordinary man did not possess. Such thoughtfulness is one of the most precious results of the life and training of the American college. It will give

[1] Life and Letters, vol. i, p. 328.

to each student a self larger, finer, nobler, more symmetrical in the relation of intellect to heart, of heart to will, of will to conscience, more aspiring, having great power of achievement, at once more patient under difficulty and in triumph more quiet, more eager to do the best of which one is capable, more willing to be content with that simple best, and more determined to extend the realm of truth and to promote the kingdom of righteousness.

If a college training fits the graduate to become a better business man, it also seeks to make him a better man. If it aids him to live without complaint in a "brazen prison," and to transmute its brass into gold, it also, and more, teaches him to appreciate, as Matthew Arnold says,

> "A world above man's head, to let him see
> How boundless might his soul's horizons be,
> How vast, yet of what clear transparency!
> How it were good to abide there, and breathe free;
> How fair a lot to fill
> Is left to each man still." [1]

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[1] A Summer Night.

THE END